COUNTY BOROUGH OF ST. HELENS

Annual Report

OF THE

Medical Officer of Health,

FOR THE YEAR 1932.

FRANK HAUXWELL, M.B., Ch.B., D.P.H.

Medical Officer of Health,
and School Medical Officer.

St. Helens:

WOOD, WESTWORTH & CO., LIMITED, PRINTERS AND STATIONERS,
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INDEX.

Health Committee.

Chairman :
ALDERMAN T. HAMBLETT, J.P.

Deputy-Chairman :
COUNCILLOR EVELYN PILKINGTON, C.B.E., J.P.

THE RIGHT WORSHIPFUL THE MAYOR,
(Councillor Thomas Wood, J.P.)

ALDERMAN F. MCCORMACK.
„ H. H. Peet, J.P.
COUNCILLOR N. BIRCH, J.P.
„ W. BURROWS.
„ A. DODD.
„ R. ELLISON, J.P.
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„ R. RENNIE.
„ J. THACKRAY, J.P.
„ T. WOODS.

Maternity and Child Welfare Committee.

Chairman :
ALDERMAN T. HAMBLETT, J.P.

Deputy Chairman :
COUNCILLOR EVELYN PILKINGTON, C.B.E., J.P.

THE HEALTH COMMITTEE
together with the following co-opted members :
MRS. H. B. BATES, AND
MRS. B. MCGHIE.

TO THE MAYOR, ALDERMEN AND COUNCILLORS OF THE COUNTY BOROUGH OF ST. HELENS.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to submit the 60th Annual Report on the health of St. Helens for the year ending 31st December, 1932.

A comparison of the main vital statistics of St. Helens for 1932 with previous years and with those of other County Boroughs in Lancashire shows that not only is the health of the borough being maintained but that it compares very favourably with other areas. The birth rate at 20.1 per 1000 of the population is the third highest of the 17 County Boroughs in Lancashire, and the death rate of 11.4 is not only the lowest of all these boroughs but is also lower than that for England and Wales as a whole. St. Helens is also seventh lowest of the Lancashire Boroughs in the tuberculosis death rate, and eighth lowest in the rate of maternal mortality. The death rate for pulmonary tuberculosis is the second lowest recorded for St. Helens. St. Helens, however, still takes a high place with its infant mortality, being fourth highest in Lancashire. When one considers the poverty in the town, this is not surprising and satisfaction must be expressed that there has been no great increase on the previous year.

In the social services provided there has been no great change during the year. These services all maintain their reputation for doing good work, though the Tuberculosis Service is handicapped by want of proper dispensary premises and further extensions in the Maternity and Child Welfare Service are required if the best results are to be obtained from that service.

In the Sanitary Services, particular attention has been given during the year to the question of Food. To milk, especially, has considerable care and attention been given as it is considered that this, which should be the safest and best of all foods, can yet be the most dangerous.

In regard to Housing, the census of 1931 showed the serious amount of overcrowding that exists in St. Helens and the large number of families in excess of the number of dwellinghouses. St. Helens holds the unenviable position of having the second highest density of persons per room of all areas in Lancashire, the only area with a higher density being Haydock. During the year, special attention has been paid to unhealthy areas and insanitary property and a commencement was made for dealing with three clearance areas and a number of individual unfit houses. Though there are no large areas of slums in the town there is a considerable number of small aggregations of property which are unfit for human habitation, and it is hoped to deal with these gradually during the next five years.

For details regarding the various and numerous activities of the Health Department I would refer to the appropriate sections of the Report.

I take this opportunity of thanking members of the Council for the kindness and consideration shown to me in the conduct of my work, and I have to record my hearty appreciation of the loyal and willing co-operation of all members of my Staff.

I have the honour to be,
Your obedient Servant,
FRANK HAUXWELL.

August, 1933.

GENERAL STATISTICS.

Area (Acres)	7,284
Population (Census, 1931)	106,789
Estimated Population mid-year 1932	107,600
* Number of structurally separate dwellings occupied and vacant	21,565
* Number of families or separate occupiers	22,960
Number of inhabited houses (end of 1932) according to Rate Books	22,580
Assessable Value	£407,114
Product of a penny rate	£1,590

* From Census, 1931.

The Net Cost on the Rates of the various Health Services in St. Helens during the year ended the 31st March, 1933, as compared with the previous year is given below.

	Pence per £	
	1931-32.	1932-33
Isolation Hospital	4.226	3.718
Tuberculosis	6.869	6.926
Maternity and Child Welfare	8.651	8.722
Venereal Diseases	.413	.435
Blind Persons	2.939	2.952
Food and Drugs Acts	.256	.218
Slaughterhouse and Cold Stores	.093	.269
Contagious Diseases of Animals	.034	.047
General Sanitary and Administrative Charges	5.957	5.950
Sewage Disposal	3.123	3.122
*Collection and Disposal of Refuse	16.256	15.958
Public Conveniences	.494	.487
Total Net Cost of Health Services	49.311	48.804

*This service is under the control of the Cleansing and Transport Committee.

STAFF.

Medical Officer of Health, Administrative Tuberculosis Officer, Medical Superintendent of Corporation Hospitals, and School Medical Officer :

Frank Hauxwell, M.B., Ch.B. (Glasgow), D.P.H. (Camb.)

Deputy Medical Officers of Health :

J. A. Fraser, M.B., Ch.B., D.P.H. (Edinburgh), (resigned 11/5/1932).

S. F. Allison, M.B., Ch.B. (Edinburgh), D.P.H. (Cambridge), (from 1/6/1932).

Assistant Medical Officers of Health :

W. H. Brown, M.B., Ch.B. (Glasgow), D.P.H. (Liverpool), (resigned 30/9/1932).

J. S. G. Burnett, M.B., Ch.B., D.P.H. (Glasgow), (from 1/11/1932).

G. O'Brien, M.B., Ch.B., D.P.H. (St. Andrews), (from 17/10/1932).

A. B. Follows, M.B., Ch.B. (Liverp.), M.R.C.S., L.R.C.P., D.P.H. (Liverp.), (resigned 30/9/1932).

Enid M. Hughes, M.B., Ch.B. (Liverpool).

Dental Surgeons :

A. G. Batten, L.D.S.

L. A. Jones, L.D.S.

Annie M. Kean, L.D.S.

Sanitary Inspectors, etc. :

Ernest Sefton, (1), (5), (10), (11), Chief Sanitary Inspector.

L. Butterworth (1), (5), Deputy Chief Sanitary Inspector, (from 4/1/1932).

H. Brown (1), (4), (5), (6)..... Sanitary Inspector.

H. Lowe (4), (6)..... do.

H. A. Perry (4), (12)..... do.

W. Johnson (12)..... do.

H. F. Rickett.....Assist. Sanitary Inspector.

T. Blashill (1), (5).....Superintendent of Public Abattoir.

Matrons of Corporation Hospitals :—

Edith Carder, Borough Isolation Hospital and Eccleston Hall Sanatorium.

Eva May Peters, St. Helens Maternity and Child Welfare Hospital.

Health Visitors and School Nurses :—

Ethel Denman,	(1), (2), (3), (7)	Mary Corrish,	(3), (7)
Mary Riding,	(3), (7)	Alice Happold,	(3), (7)
Winifred Cowan,	(2), (3), (7)	Mary Elliott,	(3), (7)
Amy Coates,	(2), (3), (7)	Edith Curran,	(3), (7)
Emily Corrish,	(2), (3), (7)	Ellen R. McDonald,	(2), (3), (7)
Daisy C. Cruickshank,	(3), (7)	Agnes MacDonald,	(2), (3), (7)
Nora Hogan,	(3), (7)	Doris Parkinson,	(2), (3), (7)

After-Care Sister (Orthopaedic Scheme) :

Constance Anthony (9)

Tuberculosis Nurse :

Grace Sumner (7)

Clerk Dispenser and Venereal Diseases Attendant :

Jas. McP. Hutton.

Venereal Disease Nurse :

Florence Wilkinson (7)

(1) Sanitary Inspector's Certificate of the Royal Sanitary Institute.
(2) Health Visitor's Certificate of the Royal Sanitary Institute.
(3) Certificate of the Central Midwives Board.
(4) Sanitary Inspector's Certificate of the Liverpool University.
(5) Certificate for Meat Inspection of the Royal Sanitary Institute.
(6) Certificate for Meat Inspection of Liverpool University.
(7) A trained Nurse.
(8) Certificate for Sanitary Science of the Royal Sanitary Institute.
(9) Certificate of Chartered Society of Masseuses, etc.
(10) Diploma of the Institute of Sanitary Engineers.
(11) Diploma of the Building Surveyors' Association.
(12) Sanitary Inspector's Certificate of the Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board.
(13) Smoke Inspector's Certificate of the Royal Sanitary Institute.

The following are part-time officers :—

District Medical Officers and Public Vaccinators :—H. B. Bates, L.S.A., L.M.S.S.A. ; J. S. Fox, M.B., C.M., M.R.C.S. ; P. J. O'Keeffe, L.R.C.P., L.R.C.S., L.R.F.P.S., I.M.

Vaccination Officer :—Alfred Griffin.

Physician to the X-ray Department, Tuberculosis Dispensary : J. Unsworth, M.B., B.S., (Lond.).

Orthopaedic Surgeon :—T. P. McMurray, M.B., M.Ch., B.A.O. (R.U.I.), F.R.C.S. (Edin.).
Ophthalmic Surgeon :—E. Allan, M.B., Ch.B. (Edin.).

Consultant Obstetrician and Gynaecologist:—J. W. Burns, M.D. (Dublin), B.A., M.B., B.Ch., B.A.O., F.R.C.S. (Edin.)

Public Analyst :—Herbert J. Evans, B.Sc., F.I.C.,F.C.S.

Veterinary Inspector :—T. J. Kenny, M.R.C.V.S.

1.—NATURAL AND SOCIAL CONDITIONS OF THE AREA.

PHYSICAL FEATURES AND GENERAL CHARACTER.—St. Helens is situated 10 miles east of Liverpool and 20 miles west of Manchester, and lies on the southern fringe of the Lancashire coal fields. The area of the borough is 7,284 acres of which approximately one-quarter only is occupied by factories and other industrial works. As a whole the borough is remarkable for the large number and extent of open spaces, and is well supplied with public parks and recreation grounds.

Geologically the soil consists of clay overlying coal measures, and owing to past mining activities some portions of the town are peculiarly susceptible to subsidence. This is particularly so in the Sutton and Derbyshire Hill districts.

SOCIAL CONDITIONS.—The chief industries of the town are coal mining and glass making.

The average number of persons unemployed in St. Helens and registered at the Labour Exchange during 1932 (as shown by the figures taken on Monday of each week) was 9,530 men, 638 women, and 539 juveniles (total 10,707). The largest number of unemployed was 12,416 in September.

The total amount of domiciliary relief granted in St. Helens by the Public Assistance Committee during the year ended 31st March, 1933, was £66,332/10/4d., of which sum £20,838/12/9d. was granted to unemployed men and their families.

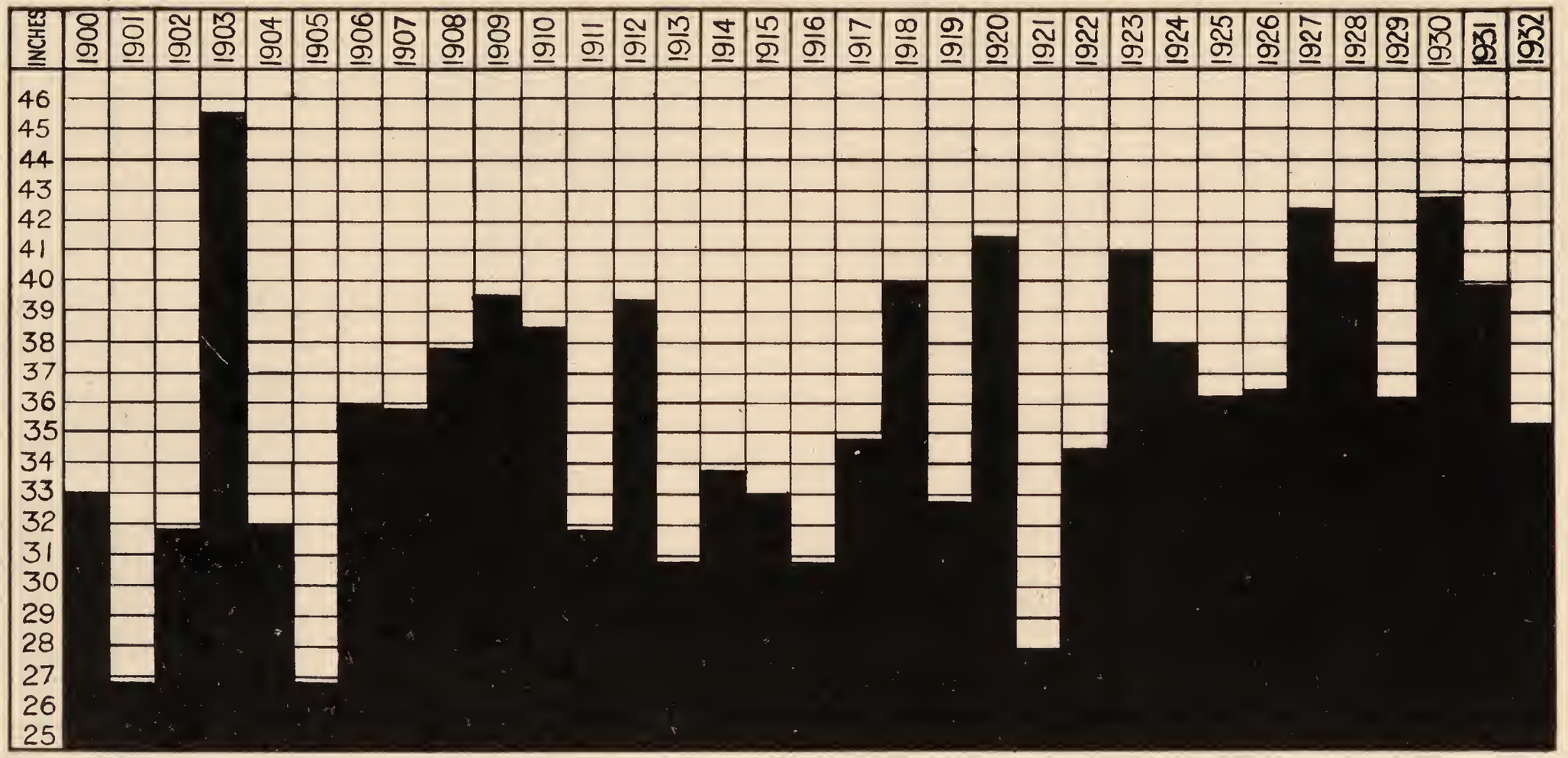
From St. Helens 342 men, 230 women and 150 children were admitted to the Poor Law Infirmary, and 183 men, 75 women and 49 children were admitted to the " House " during the year.

Under the National Health Insurance Act, the total number of insured persons in St. Helens on 1st October, 1932, was 44,291 comprising 34,158 men and 10,133 women, or approximately 41% of the total population.

METEOROLOGY.—The total rainfall for the year was 35.39 inches. The annual rainfall since 1900 is shown in Table 1. The highest temperature in the shade during the year was on the 12th August, when it reached 84.8° F, and the lowest was 21.0° F on the 12th March. The prevailing wind during the year was N.W.

Table I.

TOTAL RAINFALL IN INCHES IN ST.HELENS SINCE 1900.



The special gauge maintained in the centre of the town for the collection and measurement of the amount of atmospheric pollution showed the total solids deposited in St. Helens from the atmosphere during the year ending the 31st March, 1933 to be 15,180 metric tons per 100 square kilometres or approximately 1,466 pounds per acre.

The accompanying statement shows the amount deposited in St. Helens compared with that at other stations during the same period, the figures given being the number of metric tons of total solids per 100 square kilometres—(a metric ton per square kilometre is approximately 9 lbs. per acre).

ST. HELENS	15,180
London :—	
Finsbury Park	9,132
Kew Observatory "S"	5,281
South Kensington	7,552
Southwark Park	9,175
Wandsworth Common	6,449
Westminster	11,117
Birmingham :—	
West Heath	7,529
Newcastle-on-Tyne :—	
Town Moor	8,147
Westgate Road	10,497
Rotherham :—	
Town Hall	14,782
Oakwood Hall Sanatorium	5,640

Liverpool :—	
Cambridge Street	12,100
Netherfield Road	23,402
Leeds :—	
Headingley	4,400
Hunslet	10,182
Park Square	13,290
Sheffield :—	
Attercliffe	10,967
Nether Green	5,656
Surrey Street	14,586
Southport :—	
Hesketh Park	4,428

II.—VITAL STATISTICS.

EXTRACTS FROM VITAL STATISTICS OF THE YEAR :

	M.	F.	Total.
Births :—Legitimate	1,133	983	2,116
Illegitimate	23	21	44
Totals	1,156	1,004	2,160

Birth Rate per 1,000 of the estimated resident population.....20.1

Still Births :—M. 47, F. 57 ; Total : 104.
Rate per 1,000 total (live and still) births.....48.1

Deaths :—M. 693, F. 534 ; Total : 1,227.
Death Rate per 1,000 of the estimated resident population.....11.4

Percentage of total deaths occurring in public institutions.....37%

Number of women dying from diseases and accidents of pregnancy and child birth :—

	Deaths	Rate per 1,000 total (live and still) births.
From Sepsis	2	0.88
From other puerperal causes	7	3.09
Total	9	3.97

Deaths of infants under one year of age :—

	M.	F.	Total.
Legitimate	118	71	189
Illegitimate	2	2	4
Total	120	73	193

Death Rate of Infants under one year of age :—

All infants per 1,000 live births	89.4
Legitimate infants per 1,000 legitimate live births	89.3
Illegitimate infants per 1,000 illegitimate live births	90.9

Deaths from Measles (all ages)	1
,, Whooping Cough (all ages)	4
,, Diarrhœa (under 2 years of age)	18
,, Tuberculosis	88
Zymotic Death Rate	0.22

Table 2 shows the main vital statistics of St. Helens in comparison with those of the other County Boroughs in Lancashire, as well as with those for England and Wales and the 118 County Boroughs and Great Towns in England and Wales.

Table 2.

COUNTY BOROUGH	Estimated civil population	Birth Rate per 1,000 population	Crude Death Rate per 1,000 population	Infant Mortality per 1,000 live births	Maternal Mortality per 1,000 total (live and still) births	Tuberculosis Death Rate (all forms) per 100,000 population
England and Wales	40,201,000	15.3	12.0	65	4.0	84
118 County Boroughs and Great Towns	20,536,650	15.4	11.8	69	*	*
Barrow-in-Furness	65,700	14.4	12.6	77	2.0	97
Blackburn	122,200	12.6	12.6	67	5.5	79
Blackpool	101,400	10.3	14.4	78	5.4	73
Bolton	177,700	13.4	12.5	70	6.7	75
Bootle	77,260	22.9	13.3	86	3.2	132
Burnley	97,210	12.0	13.0	86	4.9	95
Bury	57,160	12.7	13.5	85	2.6	63
Liverpool	859,500	21.1	13.3	91	2.7	132
Manchester	763,000	15.5	13.1	86	3.8	117
Oldham	138,900	12.9	13.9	83	6.9	89
Preston	118,500	14.9	11.8	83	5.4	93
Rochdale	90,550	12.5	14.1	72	1.7	77
ST. HELENS	107,600	20.1	11.4	89	4.0	82
Salford	220,300	15.7	13.2	97	6.6	118
Southport	78,700	11.2	11.6	45	8.4	51
Warrington	79,670	17.3	12.2	88	2.7	112
Wigan	85,520	17.8	13.3	91	8.1	97

*These rates are not available.

From this table it will be seen that of the 17 County Boroughs in Lancashire, St. Helens has the third highest birth rate, the lowest death rate, and is seventh lowest in the tuberculosis death rate and eighth lowest in the rate of maternal mortality. It is, however, fourth highest in the rate of infant mortality.

Table 3 gives a summary of the vital statistics for the past 50 years.

CENSUS STATISTICS.—The final results of the Census taken on the night 26th/27th April, 1931 showed the population at that date to be 106,789 persons, comprising 54,546 males and 52,243 females. Compared with the 1921 Census, these figures show an

increase of 1,918 males and 2,231 females, giving a total increase in population of 4,149 during the intercensal period. The following statement shows the percentage increases of population of St. Helens during the intercensal periods 1911-1921 and 1921-1931 as compared with England and Wales, the County of Lancashire as a whole, the County Boroughs of Lancashire, and the Administrative County.

Intercensal Increases of Population.

	1911/1921	1921/1931
England and Wales	5.0%	5.4%
Lancashire County	3.6%	2.2%
County Boroughs of Lancashire	4.1%	1.7%
Administrative County	2.7%	2.9%
ST. HELENS	6.3%	4.0%

It will be seen from the above that, though the percentage increase in St. Helens decreased during the last intercensal period, it is still much higher than the average of the County Boroughs of Lancashire, and reference to the Registrar General's Report shows that at the last Census the rate of intercensal increase in St. Helens was the third highest of all the County Boroughs of Lancashire. St. Helens population is, therefore, still growing at a higher rate than most of the areas in Lancashire.

Reference to the Registrar General's Report also shows that the intercensal increase as measured by the excess of births over deaths during the intercensal period was 11.2 per cent., being the highest of the County Boroughs of Lancashire. The difference (7.2%) between this figure and the actual increase (4.0%) is attributable to migration.

The number of private families as shown by the Census was 22,960, with a population of 103,020.

The alterations which occurred in the populations of the Wards of the Borough during the intercensal period are shown in the following table. There is no doubt that much of the change is due to the positions of the new housing sites.

Ward	Acreage	Total Population					Increase in population	Decrease in population
		1921	1931					
		Persons	Persons	Males	Females	Persons per acre		
Central	94	6,403	5,583	3,016	2,567	59.4	—	820
East Sutton	1,312	12,308	12,582	6,599	5,983	9.6	274	—
Hardshaw	343	12,048	11,636	5,908	5,728	33.9	—	412
North Eccleston	235	12,670	11,539	5,820	5,719	49.1	—	1,131
North Windle	697	12,269	14,610	7,139	7,471	21.0	2,341	—
Parr	1,485	12,899	15,003	7,850	7,153	10.1	2,104	—
South Eccleston	622	13,618	16,436	8,227	8,209	26.4	2,818	—
South Windle	67	8,047	6,811	3,364	3,447	101.7	—	1,236
West Sutton	2,429	12,378	12,589	6,623	5,966	5.2	211	—

POPULATION.—According to the Registrar General's Estimate, the population of St. Helens on the 30th June, 1932 was 107,600. The corresponding estimate for 1931 was 108,300, so that the estimate for 1932 allows for a decrease in the population of 700 during the year. This is the second year in succession in which the Registrar General's Estimate shows a decrease, and it would appear to be due not to an actual fall in population but rather to an adjustment of the pre-censal estimates to bring them into line with the figures of the Census.

The natural increase in population during 1932, i.e., the excess of the number of births over deaths was 933 ; the natural increase in 1931 was 824.

Table 3.

Statistics for St. Helens since 1882.

YEAR	Population	Birth Rate	Death Rate	Zymotic Death Rate	Infant Mortality Rate	Rate of Persons Married	DEATHS FROM							
							Small Pox	Measles	Scarlet Fever	Typhoid Fever	Typhus Fever	Diarrhoea	Whooping Cough	Diphtheria
1882	58,903	43.7	25.4	4.95	180	—	0	205	35	24	0	85	36	38
1883	60,263	40.69	21.65	2.5	143	—	0	3	14	31	0	69	24	11
1884	61,584	42.50	24.16	5.3	173	—	0	131	16	33	2	131	9	11
1885	62,932	39.93	23.32	3.5	168	—	0	81	13	7	1	56	53	11
1886	64,311	40.70	22.46	5.2	172	—	0	102	34	28	0	122	41	10
1887	65,718	37.00	21.69	3.9	163	—	0	53	35	34	0	101	28	11
1888	67,158	39.20	19.80	3.1	151	—	0	38	11	22	0	65	61	21
1889	68,628	39.86	23.50	4.18	177	—	0	78	3	81	1	85	15	29
1890	70,132	38.90	25.43	5.3	170	—	0	19	181	24	1	74	68	13
1891	71,509	40.80	26.02	3.0	180	—	0	54	24	26	0	78	29	9
1892	72,399	40.2	21.0	2.64	147	—	1	23	18	25	0	84	31	12
1893	73,576	41.3	24.4	5.4	196	—	5	135	6	52	0	168	19	16
1894	*76,112	37.8	18.3	2.21	161	14.6	0	21	14	26	2	38	61	10
1895	77,288	40.9	21.8	3.10	181	13.0	1	54	9	59	0	101	14	8
1896	78,482	38.7	20.9	3.73	177	13.2	0	38	59	40	0	63	78	17
1897	79,694	40.0	21.8	4.3	181	14.2	0	87	44	33	0	133	33	20
1898	80,926	40.3	19.9	3.2	172	14.2	0	17	24	30	0	140	34	16
1899	82,176	38.3	20.4	2.9	157	13.0	0	21	8	43	0	114	41	15
1900	83,445	37.1	22.8	3.2	188	13.0	0	59	25	19	0	91	56	19
1901	84,734	36.9	19.7	2.56	175	13.9	0	7	29	34	0	95	17	3
1902	86,043	37.4	19.7	2.60	167	11.4	0	59	52	25	0	50	18	20
1903	87,372	39.1	17.5	1.72	138	13.0	0	1	26	18	0	53	30	23
1904	88,722	37.4	20.9	3.96	174	12.9	3	131	17	13	0	120	49	22
1905	89,843	36.1	17.2	1.88	132	11.7	0	41	16	2	0	66	26	18
1906	91,153	33.9	17.3	1.79	159	11.9	0	10	4	18	0	105	5	22
1907	92,476	34.1	18.3	2.87	155	13.6	0	145	10	12	0	36	52	11
1908	93,812	35.2	16.0	1.32	122	12.3	0	0	29	12	0	59	7	17
1909	95,161	32.0	18.5	3.5	149	12.7	0	188	33	13	0	27	62	12
1910	96,523	32.7	14.5	1.26	121	13.1	1	15	22	10	0	51	16	7
1911	96,870	33.5	18.3	3.03	158	12.7	0	69	13	22	0	143	39	8
1912	98,159	32.0	15.5	1.76	124	14.0	0	62	19	8	0	49	46	19
1913	99,460	32.2	18.9	3.74	155	14.6	0	189	26	4	0	120	18	15
1914	100,775	33.3	17.1	1.62	138	14.1	0	25	5	4	0	98	24	8
1915†	92,240	32.1	19.3	3.1	129	16.1	0	126	12	6	0	78	40	32
1916†	90,000	26.5	16.8	1.95	108	14.9	0	2	30	2	0	64	34	85
1917†	90,600	22.0	16.5	2.26	123	10.6	0	65	20	2	0	37	19	79
1918†	90,600	24.1	21.2	2.45	126	11.4	0	26	24	0	0	48	24	100
1919†	100,805	25.5	15.0	0.82	117	17.5	0	5	9	2	0	35	7	25
1920	104,822	31.8	13.5	1.2	113	16.8	0	56	7	0	0	44	7	13
1921	104,900	29.1	12.6	0.83	103	17.2	0	7	5	0	0	63	24	5
1922	106,400	26.4	13.4	0.93	115	11.5	0	60	4	2	0	28	3	5
1923	107,100	24.4	11.9	0.39	91	12.8	0	0	4	1	0	24	10	8
1924	108,700	24.1	12.0	0.68	103	12.7	0	29	1	2	4	36	11	4
1925	109,600	23.9	12.0	0.85	100	12.0	0	17	7	3	0	35	33	6
1926	110,000	23.2	12.0	0.62	102	10.2	0	27	1	0	0	43	4	6
1927	113,100	20.8	11.4	0.82	88	11.5	0	60	2	0	0	26	5	7
1928	110,500	21.8	12.0	0.67	198	11.8	0	15	5	1	0	29	21	10
1929	109,200	20.7	14.6	0.91	14	13.0	0	49	6	1	0	23	13	11
1930	109,200	21.5	11.4	0.28	80	13.6	0	7	2	0	0	4	8	4
1931	108,300	20.1	12.5	0.48	88	13.6	0	30	0	0	0	21	0	7
1932	107,600	20.1	11.4	0.22	89	13.9	0	1	1	0	0	26	4	0

† Estimated civil population.
* Borough extended.

BIRTHS.—The number of births registered in St. Helens during 1932 was 2,226. 26 births occurring in other districts were transferable to St. Helens and 92 occurring in the borough were transferred to other districts, making a total of 2,160 births belonging to the borough. The birth rate for the year was 20.1 per 1,000 of the population, being the same as the figure for the previous year. The rate for England and Wales during 1932 was 15.3 and for the 118 County Boroughs and Great Towns 15.4 per 1,000.

The following table shows the birth rate and the marriage rate for St. Helens for 1932 in comparison with the rates for quinquennial periods during the last 35 years.

Period.	Birth Rate. per 1,000 of the population.	Marriage Rate. per 1,000 of the population.
1896-1900	37.0	13.5
1901-1905	33.5	12.7
1906-1910	37.3	13.5
1911-1915	32.5	14.3
1916-1920	25.9	14.2
1921-1925	25.5	13.2
1926-1930	21.6	12.0
1930	21.5	13.6
1931	20.1	13.6
1932	20.1	13.9

In 1932 the male births numbered 1,156 and the female 1,004, being a proportion of 1,151 male to 1,000 female children born.

Illegitimate births were 2.0% of the total, as compared with 2.7% in the previous year. Table 4 gives the illegitimate birth rate since 1912.

Table 6 shows the number of births notified for each ward during the year, and Table 7 shows the birth rate for St. Helens since 1880. The births and deaths in the local hospitals are allocated to the wards in which the usual places of residence are situated.

Table 4.

Number of illegitimate births.

Years	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
Number of illegitimate births	96	97	92	78	78	112	127	131	136	81	76	70	79	68	80	62	58	72	59	44
Proportion per 1,000 population ...	0.96	0.96	0.90	0.79	0.79	1.1	1.2	1.2	1.3	0.7	0.7	0.64	0.72	0.61	0.7	0.56	0.53	0.66	0.54	0.41

Table 5.

Number of marriages.

Years	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
Number of Marriages	730	706	745	568	536	579	924	882	903	612	686	692	661	565	653	653	710	740	738	750
Marriage rate per 1,000 population ...	14.6	14.01	14.5	11.58	10.60	11.4	17.5	16.8	17.2	11.5	12.8	12.7	12.0	10.2	11.5	11.8	13.0	13.6	13.6	13.9

Table 6.

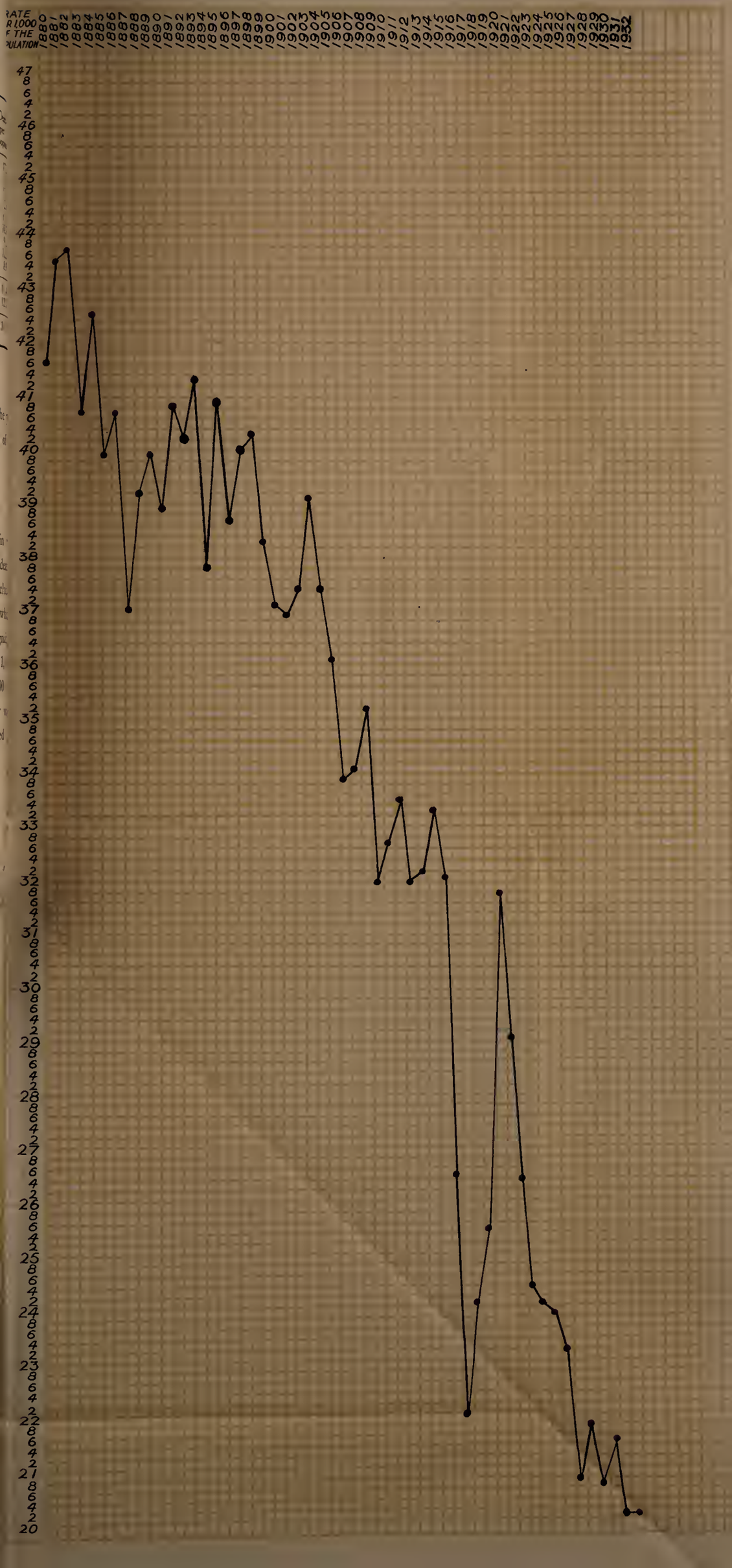
WARD	Number of births notified	Birth-rate per 1000 population	Number of deaths	Death-rate per 1000 population
Central	130	23.1	98	17.2
East Sutton	316	24.9	147	11.6
Hardshaw	206	17.6	152	13.0
North Eccleston	219	18.8	149	12.8
North Windle	260	17.7	169	11.5
Parr	378	25.0	162	10.7
South Eccleston	342	20.6	153	9.2
South Windle	116	16.9	84	12.2
West Sutton	246	19.4	113	8.9
Total	2213	20.6	1227	11.4
England and Wales	—	15.3	—	12.0
118 Great Towns	—	15.4	—	11.8

MARRIAGES.—The number of marriages during the year was 750, giving a rate of persons married of 13.9 per 1,000 of the population. Table 5 shows the rate for past years.

DEATHS.—The number of deaths occurring within the borough during the year was 1,154. This total includes 149 deaths in St. Helens of persons usually resident in other areas, but excludes 222 deaths of persons usually resident within the borough which occurred in other areas, so that the actual number of deaths assignable to St. Helens is 1,227. This gives a death rate of 11.4 per 1,000 of the population, compared with a death rate of 12.5 per 1,000 for 1931. The death rate for England and Wales for the year was 12.0 per 1,000. 37% of the deaths during the year occurred in public institutions.

Table 7.

Birth Rate – St. Helens, 1880–1932



out an inquest to issue a certificate attributing the death to natura causes. In 65 instances an inquest was held, and in these cases th e deaths were recorded as attributable to :—

Colliery Accidents	2
Street Accidents	15
Accidents in Works	3
Drowning	9
Poisoning	5
Scalds and Burns	9
Other Deaths from violence	10
Natural Causes	10
Other Causes	2
	65

Causes of Death.—Figures relating to the causes of and ages at death during the year are given in Table 9.

Zymotic Death Rate.—The number of deaths caused by the " seven principal epidemic diseases " during 1932 was 24, giving a zymotic death rate of 0.22 per 1,000 of the population as compared with 0.48 during 1931. Compared with the previous year there was a marked diminution in the number of deaths from measles and diphtheria.

The causes of these deaths during 1932 were as follows :—

Diarrhœa and enteritis (under 2 years)	18
Whooping Cough	4
Measles	1
Scarlet Fever	1
Diphtheria (including membranous croup)	0
Fever (enteric, typhus, and simple continued fever)	0
Smallpox	0

Table 3 shows the figures since 1882.

Deaths from Tuberculosis.—Tuberculosis was the cause of 88 deaths during the year—that is 7.17% of all deaths belonging to the borough. Of these deaths, 68 were attributable to tuberculosis of the lungs and 20 to other forms of tuberculosis. The ages at which these deaths occurred are shown in Table 9.

Malignant Diseases.—The deaths from these diseases during the past five years were as follows :—

AGE	1927	1928	1929	1930	1931	1932
Under 1 year	—	1	1	—	—	—
1—2 years	—	—	—	—	—	—
2—3 „	1	—	1	—	—	—
3—4 „	—	—	—	—	—	—
4—5 „	—	—	—	—	—	—
5—10 „	1	—	—	—	—	—
10—15 „	—	—	—	—	—	—
15—20 „	—	—	1	2	—	—
20—35 „	7	3	4	2	1	5
35—45 „	4	10	9	7	8	6
45—65 „	55	54	48	49	61	64
65 and over	36	53	38	42	51	53
Totals	104	121	102	102	121	128
Percentage of the total deaths ...	8.06	9.11	6.38	8.19	8.94	10.43
Death rate per 1,000 of population	0.91	1.09	0.93	0.93	1.12	1.19
Death rate per 1,000 of population, England and Wales ...	1.38	1.43	1.44	1.45	1.48	1.51

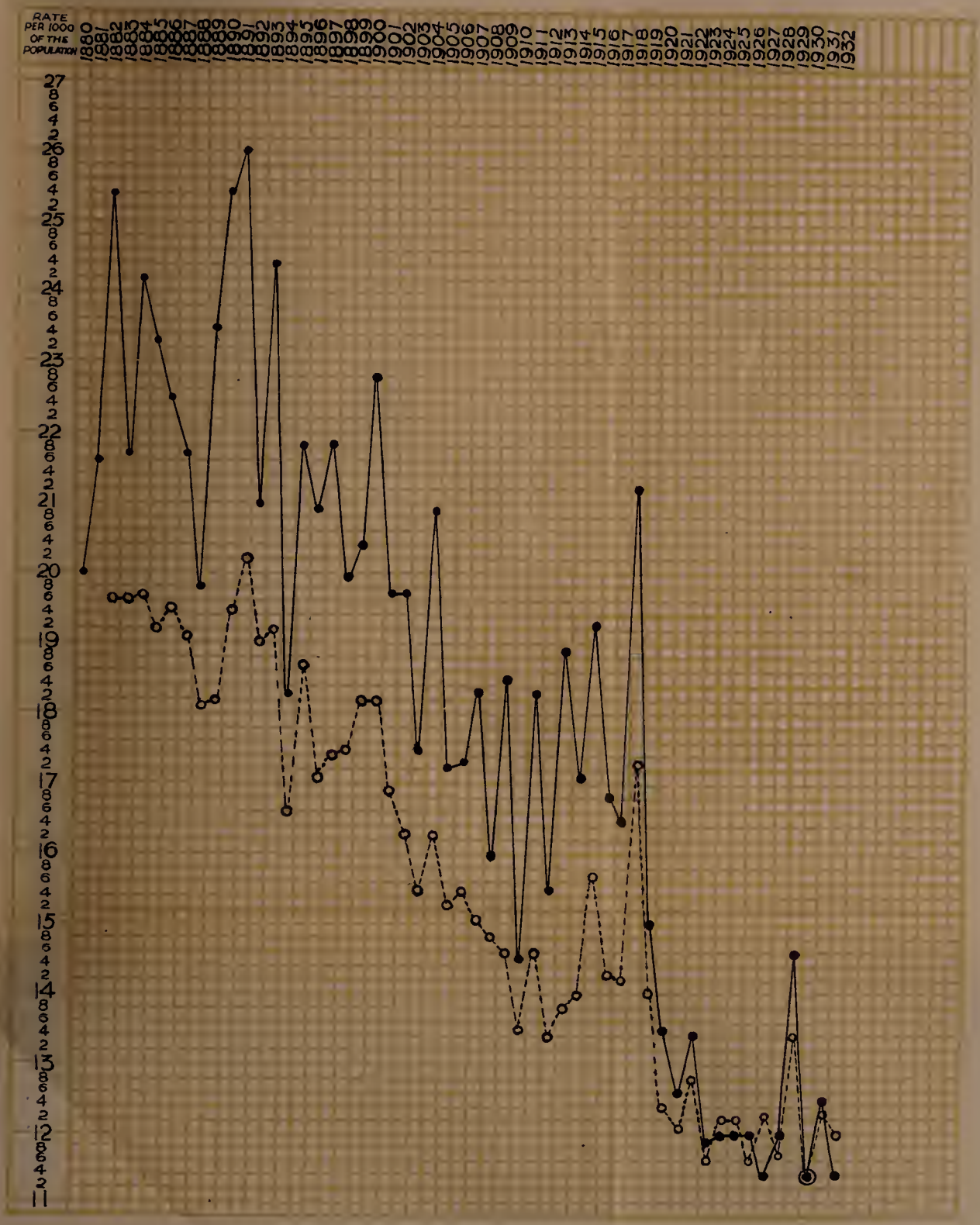
There would appear to be no relationship between the incidence of malignant diseases and industrial processes in St. Helens.

Other causes of death.—The following extract from Table 9 shows some of the other principal causes of death :—

	Number	Percentage of Total Deaths.
Pneumonia (all forms)	119	9.7
Bronchitis and other Respiratory Diseases	102	8.31
Influenza	49	3.99
Heart Disease	173	14.1
Cerebral Haemorrhage, etc.	69	5.62
Suicide and other deaths from violence	60	4.89

TABLE 8.

DEATH RATE – ST. HELENS & ENGLAND & WALES. 1880 - 1932.



The death rates are not corrected for age & sex distribution.

St. Helens. ●——— England & Wales o-------

TABLE 8

DEATH RATE – STRELENS & ENGLAND.

A comparison of the death rate in St. Helens for quinquennial periods during the past 50 years and for the years 1930, 1931 and 1932 with the rate for England and Wales during the same period is seen in the following statement :—

Period.	Death Rate per 1,000 of the population. St. Helens. (Crude).	England and Wales.
1881-85	23.2	19.4
1886-90	22.5	18.9
1891-95	21.8	18.7
1896-1900	20.3	17.7
1901-05	19.0	16.0
1906-10	16.9	14.7
1911-15	19.8	14.3
1916-20	16.6	14.4
1921-25	12.3	12.1
1926-30	12.3	12.1
1930	11.4	11.4
1931	12.5	12.3
1932	11.4	12.0

Table 6 gives the number of deaths in the different wards during 1932, and Table 8 shows the death rate in the borough and for England and Wales since 1880.

Seasonal Deaths.—The following statement gives the number of St. Helens deaths in each quarter of the year, with the death rate for each quarter, and the death rate for England and Wales for the same periods.

	No. of Deaths.	Death rate per 1,000 of population. St. Helens	England & Wales
First Quarter	407	15.1	15.4
Second Quarter	282	10.5	11.6
Third Quarter	234	8.7	9.7
Fourth Quarter	304	11.3	11.5

Coroner's Inquests.—During the year, 108 deaths were reported to the Coroner. In 43 of these the Coroner was able with-

out an inquest to issue a certificate attributing the death to natura causes. In 65 instances an inquest was held, and in these cases th e deaths were recorded as attributable to :—

Colliery Accidents	2
Street Accidents	15
Accidents in Works	3
Drowning	9
Poisoning	5
Scalds and Burns	9
Other Deaths from violence	10
Natural Causes	10
Other Causes	2
	65

Causes of Death.—Figures relating to the causes of and ages at death during the year are given in Table 9.

Zymotic Death Rate.—The number of deaths caused by the " seven principal epidemic diseases " during 1932 was 24, giving a zymotic death rate of 0.22 per 1,000 of the population as compared with 0.48 during 1931. Compared with the previous year there was a marked diminution in the number of deaths from measles and diphtheria.

The causes of these deaths during 1932 were as follows :—

Diarrhœa and enteritis (under 2 years)	18
Whooping Cough	4
Measles	1
Scarlet Fever	1
Diphtheria (including membranous croup)	0
Fever (enteric, typhus, and simple continued fever)	0
Smallpox	0

Table 3 shows the figures since 1882.

Deaths from Tuberculosis.—Tuberculosis was the cause of 88 deaths during the year—that is 7.17% of all deaths belonging to the borough. Of these deaths, 68 were attributable to tuberculosis of the lungs and 20 to other forms of tuberculosis. The ages at which these deaths occurred are shown in Table 9.

Malignant Diseases.—The deaths from these diseases during the past five years were as follows :—

AGE	1927	1928	1929	1930	1931	1932
Under 1 year	—	1	1	—	—	—
1—2 years	—	—	—	—	—	—
2—3 „	1	—	1	—	—	—
3—4 „	—	—	—	—	—	—
4—5 „	—	—	—	—	—	—
5—10 „	1	—	—	—	—	—
10—15 „	—	—	—	—	—	—
15—20 „	—	—	1	2	—	—
20—35 „	7	3	4	2	1	5
35—45 „	4	10	9	7	8	6
45—65 „	55	54	48	49	61	64
65 and over	36	53	38	42	51	53
Totals	104	121	102	102	121	128
Percentage of the total deaths ...	8.06	9.11	6.38	8.19	8.94	10.43
Death rate per 1,000 of population	0.91	1.09	0.93	0.93	1.12	1.19
Death rate per 1,000 of population, England and Wales ...	1.38	1.43	1.44	1.45	1.48	1.51

There would appear to be no relationship between the incidence of malignant diseases and industrial processes in St. Helens.

Other causes of death.—The following extract from Table 9 shows some of the other principal causes of death :—

	Number	Percentage of Total Deaths.
Pneumonia (all forms)	119	9.7
Bronchitis and other Respiratory Diseases	102	8.31
Influenza	49	3.99
Heart Disease	173	14.1
Cerebral Haemorrhage, etc.	69	5.62
Suicide and other deaths from violence	60	4.89

Table 9.

Causes of, and age at, death during 1932.

Causes of Death	Sex	All Ages	At Ages 0–1	1—	2—	5—	15—	25-	35–	45–	55–	65–	75–
All Causes	M	693	120	28	32	24	30	28	32	54	118	166	61
	F	534	73	19	15	17	27	34	33	58	69	96	93
Typhoid and paratyphoid fevers	M	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
Measles	M	1	—	—	1	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet fever	M	—	—	—	—	—	—	—	—	—	—	—	—
	F	1	—	—	—	1	—	—	—	—	—	—	—
Whooping cough	M	1	—	1	—	—	—	—	—	—	—	—	—
	F	3	—	1	2	—	—	—	—	—	—	—	—
Diphtheria	M	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
Influenza	M	29	2	3	3	4	1	2	3	1	3	6	1
	F	20	2	1	2	1	—	—	1	4	1	6	2
Encephalitis lethargica	M	1	—	—	—	1	—	—	—	—	—	—	—
	F	1	—	—	—	—	1	—	—	—	—	—	—
Cerebro-spinal fever	M	4	1	—	2	—	—	1	—	—	—	—	—
	F	4	—	2	—	1	—	—	—	1	—	—	—
Tuberculosis of respiratory system	M	34	—	1	—	1	12	3	6	6	4	1	—
	F	34	—	—	—	2	15	8	4	3	2	—	—
Other tuberculous diseases	M	10	2	2	3	1	1	—	—	1	—	—	—
	F	10	1	1	1	2	1	3	—	—	1	—	—
Syphilis	M	1	1	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
General paralysis of the insane, tabes dorsalis	M	1	—	—	—	—	—	—	—	—	1	—	—
	F	1	—	—	—	—	1	—	—	—	—	—	—
Cancer, Malignant disease	M	66	—	—	—	—	—	3	—	8	26	25	4
	F	62	—	—	—	—	—	2	6	11	19	16	8
Diabetes	M	6	—	—	—	—	1	1	—	1	2	1	—
	F	7	—	—	—	—	—	—	1	2	1	3	—
Cerebral haemorrhage, etc.	M	35	—	—	—	—	—	—	—	2	8	19	6
	F	34	—	—	1	—	—	—	—	2	3	15	13
Heart Disease	M	99	—	—	1	1	3	2	2	6	20	53	11
	F	74	—	—	—	1	3	6	3	13	12	19	17
Aneurysm	M	1	—	—	—	—	—	—	—	—	—	1	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
Other circulatory diseases	M	14	—	—	—	—	—	—	—	—	3	5	6
	F	15	—	—	—	—	—	—	—	—	1	8	6
Bronchitis	M	62	11	5	—	—	1	1	5	8	10	13	8
	F	29	5	3	—	—	—	—	—	1	4	7	9
Pneumonia (all forms)	M	73	21	7	10	8	2	3	11	4	2	4	1
	F	46	16	6	4	4	1	2	3	3	2	1	4
Other respiratory diseases	M	6	—	—	—	—	—	2	—	1	2	—	1
	F	5	1	—	1	—	—	3	—	—	—	—	—
Peptic ulcer	M	3	—	—	—	—	1	—	—	1	1	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa, etc.	M	16	9	2	1	2	—	—	—	—	1	1	—
	F	10	7	—	—	1	—	—	—	1	—	1	—
Appendicitis	M	1	—	—	—	1	—	—	—	—	—	—	—
	F	2	—	—	1	1	—	—	—	—	—	—	—
Cirrhosis of liver	M	2	—	—	—	—	—	—	—	—	1	1	—
	F	2	—	—	—	—	—	—	—	—	2	—	—
Other diseases of liver, etc.	M	2	—	—	—	—	—	—	—	1	1	—	—
	F	4	—	—	—	—	—	—	1	1	2	—	—
Other digestive diseases	M	21	5	—	—	—	—	2	1	2	4	6	1
	F	14	4	2	—	—	—	—	1	3	3	1	—

Table 10.

Infant Mortality Rate, St. Helens and England and Wales - 1880-1932

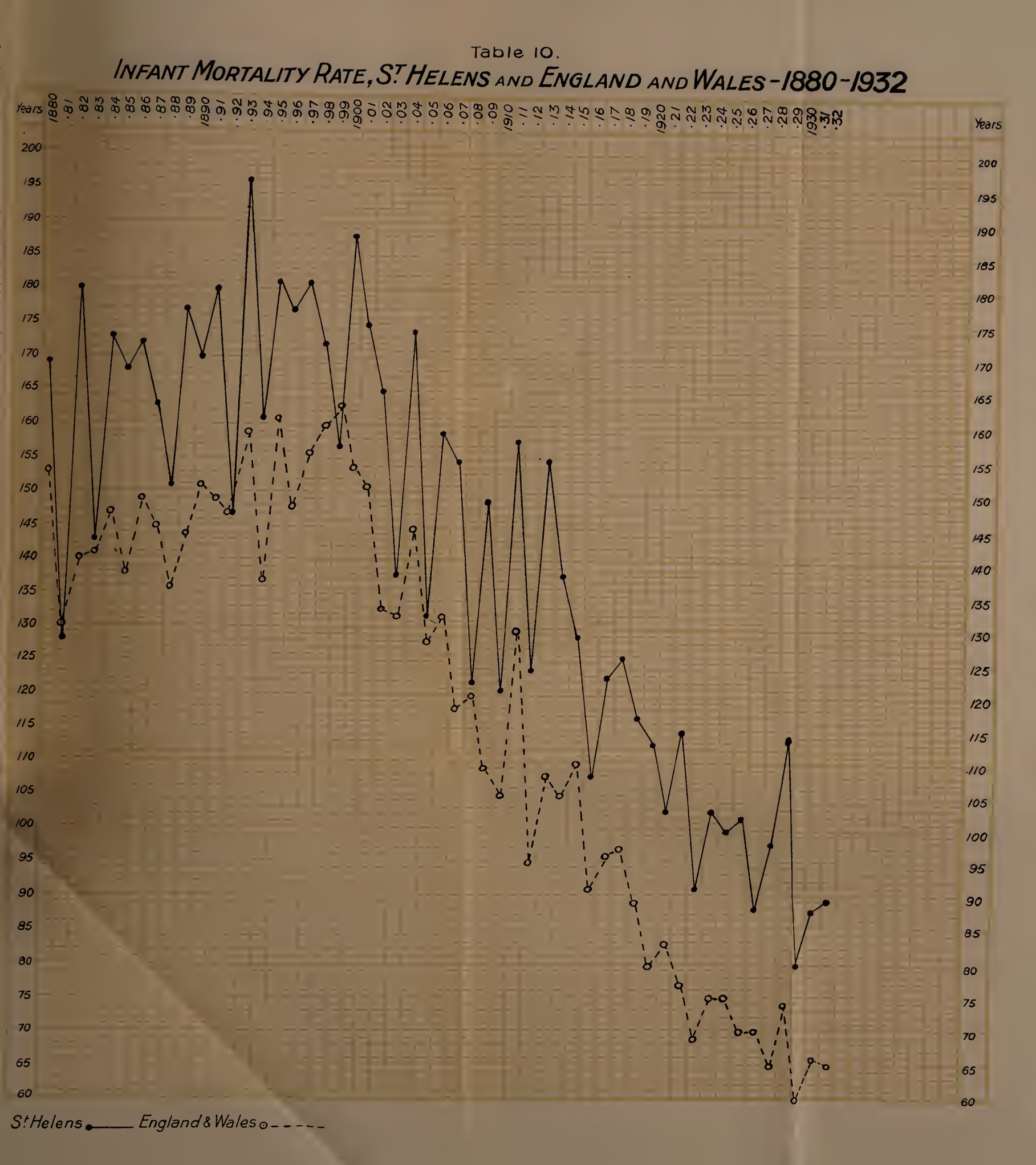


Table 9—*continued.*

Causes of Death	Sex	All Ages	At Ages 0–1	1—	2—	5—	15–	25–	35–	45–	55–	65–	75–
Acute and chronic nephritis	M	15	—	—	—	1	—	2	—	4	4	4	—
	F	15	—	—	—	—	1	—	3	3	4	2	2
Puerperal Sepsis	F	2	—	—	—	—	—	1	1	—	—	—	—
Other puerperal causes	F	7	—	—	—	—	—	6	1	—	—	—	—
Congenital debility, premature birth, malformations, etc.	M	61	60	—	—	—	1	—	—	—	—	—	—
	F	32	32	—	—	—	—	—	—	—	—	—	—
Senility	M	36	—	—	—	—	—	—	—	—	—	18	18
	F	37	—	—	—	—	—	—	—	—	—	9	28
Suicide.....	M	6	—	—	—	—	1	1	—	1	3	—	—
	F	3	—	—	—	—	—	—	2	—	1	—	—
Other violence	M	39	—	5	9	3	3	3	2	4	4	4	2
	F	12	2	1	1	2	2	1	1	1	—	—	1
Other defined diseases	M	43	8	2	2	1	3	2	2	3	15	3	2
	F	42	3	1	2	1	2	2	5	8	10	6	2
Causes ill-defined or unknown	M	4	—	—	—	—	—	—	—	—	3	1	—
	F	6	—	1	—	—	—	—	—	1	1	2	1
Totals		1227	193	47	47	41	57	62	65	112	187	262	154

Infant Mortality.—During 1932 there were 193 deaths of children under one year of age. This corresponds to an infant mortality rate of 89.4 per 1,000 births. The infant death rate for 1931 was 88.2.

Further reference to this subject is made in the Maternity and Child Welfare Section.

Table 10 shows the infant death rate for St. Helens since 1880, and the figures for England and Wales for the same period.

III.—INFECTIOUS DISEASES.

The following are the infectious diseases compulsorily notifiable to the Medical Officer of Health in St. Helens :—

Smallpox	Puerperal Fever
Scarlet Fever	Puerperal Pyrexia
Diphtheria and Membranous Croup	Cerebro Spinal Fever
	Acute Poliomyelitis
Enteric Fever	Acute Polio Encephalitis
Typhus Fever	Acute Encephalitis Lethargica
Relapsing Fever	Ophthalmia Neonatorum
Continued Fever	Erysipelas
Dysentery	Malaria
*Pneumonia	†Measles and German Measles
Cholera	†Whooping Cough
Plague	Tuberculosis (all forms)

**Acute Primary Pneumonia and Acute Influenzal Pneumonia.*

†*Notification by medical practitioner is not required if the disease "has occurred in the same family or institution and been notified within the period of two months immediately preceding the date on which he first becomes aware of a further case."*

Table 11 shows the total number of cases notified during the year, the total number of deaths which occurred, and the numbers admitted to the Corporation Hospitals.

Table 12 gives the age distribution of the cases notified, and Table 9 the age distribution of the deaths which occurred. The number of cases notified during each week of the year is shown in Table 13, and the number of notifications each year during the past 10 years is seen in Table 14.

Table 11.

Infectious Diseases, 1932.—Total number of cases notified, number of cases admitted to hospital, and the total deaths.

DISEASE	Notifications received	Cases admitted to hospital	Total Deaths
Smallpox	—	—	—
Diphtheria	86	86	—
Scarlet Fever	147	146	1
Enteric Fever	—	—	—
Typhus Fever	—	—	—
Puerperal Fever	6	6	2
Puerperal Pyrexia	8	5	
Erysipelas	58	4	2
Pneumonia	308	4	119
Ophthalmia Neonatorum	7	3	—
Poliomyelitis	—	—	—
Encephalitis Lethargica	1	—	2
Cerebro Spinal Fever	17	16	8
Dysentery	15	—	—
Measles	512	5	1
Whooping Cough	34	—	4
Malaria	—	—	—

Table 12.

Age distribution of cases of Infectious Diseases notified during 1932.

DISEASE	Notifications received.	Under 1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	147	2	9	9	11	20	76	18	—	2	—	—	—
Diphtheria	86	1	6	5	4	11	28	9	7	11	2	2	—
Pneumonia	308	26	27	25	28	34	73	27	10	19	11	25	3
Erysipelas	58	—	—	—	—	—	2	3	1	4	13	24	11
Puerperal Fever	6	—	—	—	—	—	—	—	—	6	—	—	—
Puerperal Pyrexia	8	—	—	—	—	—	—	—	—	5	3	—	—
Ophthalmia Neonatorum	7	7	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica	1	—	—	—	—	—	—	1	—	—	—	—	—
Cerebro Spinal Fever	17	1	1	1	5	1	1	2	2	3	—	—	—
Dysentery	15	—	—	—	—	—	—	—	—	2	1	7	5
Whooping Cough	394	52	47	38	53	53	147	2	2	—	—	—	—
Measles	512	43	26	32	39	67	276	21	3	4	1	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 13.

Infectious Diseases.—Number of cases of Infectious Diseases notified each week in 1932.

Week Ending	Cerebro Spinal Fever	Diphtheria	Dysentery	Encephalitis Lethargica	Enteric Fever	Erysipelas	Measles	Malaria	Ophthalmia Neonatorum	Pneumonia	Poliomyelitis	Puerperal Fever	Puerperal Pyrexia	Scarlet Fever	Smallpox	Whooping C
Jan. 9	—	—	—	—	—	3	1	—	—	6	—	—	—	4	—	2
16	—	—	—	—	—	—	1	—	—	5	—	—	—	1	—	2
23	—	1	1	—	—	1	3	—	—	9	—	—	—	3	—	—
30	—	1	—	—	—	—	1	—	—	10	—	—	—	5	—	2
Feb. 6	—	1	1	—	—	—	—	—	—	12	—	1	—	2	—	3
13	—	2	2	—	—	1	1	—	—	17	—	—	—	4	—	1
20	—	4	1	—	—	—	5	—	—	5	—	2	—	2	—	—
27	—	2	—	—	—	3	—	—	—	10	—	—	—	3	—	1
Mar. 5	—	—	2	—	—	2	—	—	—	10	—	1	—	3	—	1
12	1	2	2	—	—	3	1	—	—	6	—	—	1	—	—	1
19	—	1	2	—	—	2	—	—	—	7	—	—	—	6	—	—
26	—	2	3	—	—	1	—	—	—	1	—	—	—	3	—	—
Apl. 2	—	3	—	—	—	1	3	—	—	3	—	—	—	1	—	—
9	1	4	—	—	—	2	1	—	—	1	—	—	—	2	—	2
16	2	1	—	—	—	1	1	—	—	3	—	—	—	1	—	—
23	—	1	—	—	—	1	4	—	1	2	—	—	—	—	—	1
30	2	4	1	—	—	2	2	—	—	6	—	—	—	1	—	—
May 7	4	2	—	—	—	2	1	—	—	5	—	1	1	1	—	3
14	—	—	—	—	—	1	5	—	—	6	—	—	1	3	—	—
21	1	1	—	—	—	1	3	—	—	6	—	—	—	6	—	4
28	—	—	—	—	—	1	5	—	—	3	—	1	1	6	—	1
June 4	—	—	—	—	—	2	5	—	—	5	—	—	1	9	—	—
11	—	1	—	—	—	1	5	—	—	5	—	—	—	6	—	3
18	1	—	—	—	—	2	7	—	—	7	—	—	—	8	—	1
25	—	3	—	—	—	—	7	—	—	4	—	—	—	2	—	—
July 2	1	1	—	—	—	1	7	—	1	7	—	—	—	3	—	—
9	—	2	—	—	—	1	15	—	—	5	—	—	—	3	—	—
16	—	—	—	—	—	1	9	—	—	4	—	—	—	—	—	1
23	—	2	—	—	—	—	6	—	—	5	—	—	—	1	—	6
30	—	3	—	—	—	2	7	—	—	1	—	—	—	4	—	4
Aug. 6	1	—	—	—	—	1	4	—	—	6	—	—	—	4	—	1
13	—	1	—	—	—	—	3	—	1	4	—	—	—	2	—	4
20	—	5	—	—	—	—	2	—	—	2	—	—	—	8	—	2
27	—	2	—	—	—	1	9	—	1	—	—	—	—	1	—	1
Sept. 3	1	1	—	—	—	—	5	—	—	3	—	—	1	2	—	8
10	—	1	—	—	—	—	7	—	—	6	—	—	—	—	—	5
17	—	2	—	—	—	—	9	—	1	3	—	—	1	2	—	1
24	—	1	—	—	—	2	10	—	—	6	—	—	—	2	—	11
Oct. 1	—	2	—	1	—	—	13	—	—	6	—	—	—	—	—	6
8	—	4	—	—	—	1	22	—	—	5	—	—	1	5	—	2
15	1	1	—	—	—	1	8	—	1	3	—	—	—	2	—	7
22	—	2	—	—	—	—	27	—	1	5	—	—	—	3	—	5
29	—	1	—	—	—	1	27	—	—	4	—	—	—	1	—	9
Nov. 5	—	5	—	—	—	—	21	—	—	8	—	—	—	1	—	8
12	—	3	—	—	—	2	20	—	—	8	—	—	—	3	—	30
19	—	2	—	—	—	1	22	—	—	5	—	—	—	3	—	23
26	—	2	—	—	—	—	29	—	—	6	—	—	—	2	—	34
Dec. 3	—	4	—	—	—	1	30	—	—	8	—	—	—	2	—	29
10	—	—	—	—	—	1	27	—	—	10	—	—	—	2	—	32
17	1	2	—	—	—	1	38	—	—	11	—	—	—	5	—	45
24	—	1	—	—	—	3	43	—	—	16	—	—	—	3	—	63
31	—	—	—	—	—	4	30	—	—	7	—	—	—	1	—	29
Total	17	86	15	1	—	58	512	—	7	308	—	6	8	147	—	394

Table 14.

Notifications of Infectious Diseases received during the undermentioned years.

	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
Diphtheria	105	89	145	103	131	153	170	162	121	86
Scarlet Fever ...	258	163	241	153	206	1111	506	255	148	147
Enteric Fever ...	2	2	7	1	1	1	2	3	1	—
Puerperal Fever ...	4	17	16	7	6	11	16	17	7	6
†Puerperal Pyrexia...	—	—	—	10	23	20	25	13	8	8
Pneumonia	190	126	242	256	209	263	491	251	226	308
Erysipelas	53	40	70	42	70	80	77	72	52	58
Ophthalmia Neonatorum ...	30	34	16	23	23	20	24	14	3	7
Poliomyelitis ...	1	1	1	—	—	—	9	—	—	—
Continued Fever ...	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica ...	9	4	2	3	2	3	1	2	1	1
Polio-Encephalitis...	—	—	—	—	—	—	—	—	—	—
Dysentery	6	—	3	6	1	13	1	2	—	15
Malaria	—	—	—	—	1	—	—	—	—	—
Measles	74	3513	1850	1625	2892	1465	1995	1026	2332	512
Whooping Cough ...	895	235	920	304	448	649	685	516	43	394
Cerebro Spinal Fever	1	2	2	2	—	—	1	—	—	17
Smallpox	—	—	—	—	—	2	—	—	—	—
Typhus Fever ...	—	8	—	—	—	—	—	—	—	—

† Notifiable since 1st October, 1926.

SMALLPOX.—No case of smallpox was notified during the year.

The extent of vaccination in St. Helens since 1901 is shown in Table 15.

Table 15.

Vaccination returns since 1901.

YEAR	2 Vaccinated	3 Insusceptible	4 Dead	5 Conscientious Objector	6 Postponed	7 Removed	8 Unaccounted	Percentage not Vaccinated including Columns 5, 6, 7, 8
1901	2,639	4	391	11	29	59	24	4.4
1902	2,788	4	342	7	12	58	34	3.8
1903	2,977	8	325	2	6	62	11	2.6
1904	2,940	7	341	10	10	42	25	2.8
1905	2,923	3	270	6	10	29	18	2.1
1906	2,733	5	318	8	12	39	22	2.8
1907	2,810	9	257	24	19	49	17	3.7
1908	2,858	18	248	70	11	35	20	4.5
1909	2,720	8	241	81	9	33	11	4.7
1910	2,731	3	255	131	3	23	19	6.0
1911	2,750	9	277	148	5	26	14	6.5
1912	2,646	4	294	216	12	23	4	8.7
1913	2,499	6	296	339	14	27	9	13.0
1914	2,654	11	281	348	6	22	24	13.0
1915	2,352	2	189	367	9	34	15	15.3
1916	2,056	4	186	287	3	39	24	14.6
1917	1,702	4	158	267	1	6	45	15.7
1918	1,861	0	201	281	8	40	19	14.5
1919	1,999	2	189	385	4	25	18	17.8
1920	2,452	1	223	553	12	18	23	19.8
1921	2,234	2	179	530	6	29	17	20.6
1922	2,143	7	185	411	5	27	23	17.8
1923	2,144	10	139	261	4	10	22	12.17
1924	2,227	7	156	157	6	12	25	8.24
1925	2,150	2	147	234	8	10	26	11.45
1926	2,084	8	151	237	14	9	14	11.62
1927	1,984	7	145	196	10	20	11	10.67
1928	1,990	5	149	242	8	20	8	12.26
1929	1,782	8	139	288	7	16	11	15.3
1930	1,852	3	122	317	8	11	19	16.09
1931	1,724	9	116	329	8	11	15	17.39 †

† Of the 17.39 per cent unvaccinated, 15.77 per cent. are conscientious objectors.

SCARLET FEVER.—During 1932, 147 cases were notified and 146 of these were admitted to the Infectious Diseases Hospital. In one case only—a severely septic case with multiple complications—was the disease fatal. Cases are discharged from hospital, if clean, i.e., free from complications, discharges, blemishes, etc. at the end of

28 days, but during 1932 the average duration of stay was 37.3 days, the longer period being accounted for by the greater number of septic and " spotty " cases. This longer stay was necessary even although a more frequent and liberal use of anti-scarletina serum was made in the serious cases.

The following statement shows the age distribution of all cases occurring and of the deaths.

Ages.	No. of cases.	No. of Deaths	Case Mortality.
Under 5 years	51	—	—
5-15 years	94	1	1.1%
Over 15 years	2	—	—

DIPHTHERIA.—During 1932, 86 cases were notified, but in no case did the disease prove fatal. Generally speaking the cases were of a mild or moderate type and there were no epidemic outbursts. The number of cases notified was the lowest since 1921 and as will be seen in Table 3 there are no records of any previous year with a complete absence of mortality from this disease.

The following statement shows the age distribution of the cases occurring in 1932 :—

Ages.	No. of cases.	No. of deaths	Case Mortality.
Under 5 years	27	—	—
5-15 years	37	—	—
15-45 years	20	—	—
Over 45 years	2	—	—

Diphtheria anti-toxin is available for medical practitioners either at the office of the Medical Officer of Health or at the Borough Isolation Hospital.

No attempt has yet been made to detect susceptibles among the general community and to immunise them against diphtheria, but it is hoped, in the near future, to inaugurate a scheme offering facilities for the discovery of susceptibles and affording them the opportunity of being immunised. When put into practice, the scheme, if it meets with public support, should do much to reduce the incidence and mortality of this very dangerous disease.

ENTERIC FEVER.—No case was notified during the year 1932

***MEASLES.**—The number of cases, 512, notified throughout the year was the lowest since 1923. The largest number of cases occurred towards the end of the year, from October to December, when a minor epidemic occurred among school children. The maximum number of cases occurring in any week was 43 in the week ended the 24th December.

The disease was generally of a mild type with a higher incidence in the age group 5-15 years. Only one death occurred.

The following statement shows the age distribution of the cases and the deaths :—

Ages.	No. of cases	No. of deaths.	Case Mortality.
Under 5 years	207	1	0.48%
5—15 years	297	—	—
Over 15 years	8	—	—

* Note.—Further details regarding this disease will be found in that section of the Report dealing with Maternity and Child Welfare, page 62.

***WHOOPING COUGH.**—During 1932, 394 cases were notified, and of this number 4 were fatal.

The commencement of an epidemic in early November, which continued unabated till the end of the year, accounted for the majority of the cases.

The age distribution of the cases and of the deaths was as follows :—

Ages	No. of cases.	No. of deaths.	Case Mortality.
Under 5 years	243	4	1.65%
5-15 years	149	—	—
Over 15 years	2	—	—

***PUERPERAL FEVER AND PUERPERAL PYREXIA.**—6 cases of puerperal fever and 8 cases of puerperal pyrexia were notified during the year, and 2 deaths were reported as due to puerperal sepsis. Accommodation is available at the Borough Isolation Hospital, and every endeavour is made to get such cases into hospital. During the year all the cases of puerperal fever and 5 of the 8 cases of puerperal pyrexia were admitted to that hospital, and the other 3 cases were nursed at home.

***OPHTHALMIA NEONATORUM.**—7 cases were notified during 1932.

CEREBRO-SPINAL MENINGITIS.—During the spring of 1932 a small outbreak of cerebro-spinal meningitis occurred, followed by sporadic cases throughout the remainder of the year. In all, 18 cases occurred (only 17 of which were notified) with 8 deaths. Previous to this, the last case in St. Helens was one in 1929.

* Note.—Further details regarding this disease will be found in that section of the Report dealing with Maternity and Child Welfare, page 62.

The first indication of the presence of this disease in the neighbourhood was the admission on the 8th of April to the St. Helens Isolation Hospital of a child, age 8 years, from Haydock. On the 12th April two cases resident in St. Helens were reported and were admitted to the Isolation Hospital. One of these had been an inpatient in one of the local general hospitals some 2 to 3 weeks previous to notification, and in following this case up, it was discovered that a previous case had occurred (but had not been notified) in that hospital in March and been discharged home at the parents' request before recovery. This case was subsequently notified but died at home. A fourth St. Helens case came to notice through the report of the District Registrar of the certification of a death due to cerebro-spinal meningitis on the 12th April. No notification had been received of this case but on making enquiries it was considered to be a true case. Apart from the two cases which had been in the local general hospital no connection could be traced between any of these cases.

The next series of cases may be said to have commenced with the notification on the 29th April of a girl age 12 years. On making enquiries in this case it was discovered that she and her parents had been visiting sick friends at another local general hospital. Enquiry at that hospital revealed three further cases of cerebro-spinal meningitis—2 girls age 7 and 16½ years and a boy age 15 months. These cases had been in that hospital for periods ranging from a few days to a month before any suspicion of cerebro-spinal meningitis arose. All were removed to the Isolation Hospital and recovered.

Between the 30th April and 17th May, four further cases were notified from different parts of the town, but after that date cases occurred at less frequent and gradually lengthening intervals, the last being on 16th December. During the current year, however, there was a recrudescence in the early months of the year.

Practically all cases admitted to the Isolation Hospital were confirmed by bacteriological examination and all cases admitted were treated with the anti-meningococcic serum.

The history of these cases shows the difficulty in administrative control of this disease, in which it is now generally accepted that the infection is carried by healthy carriers. The late notification of so many cases increased enormously the number of contacts and so increased the number of possible healthy carriers. In fact, the cases were scattered throughout the town, and the only case in which connection with a previous case might be suggested was in the 5th case (notified 29th April) which had been visiting a hospital in which it was later proved cases were being treated. That any of the cases actually took the disease in either of the general hospitals in which they were found was considered unlikely, it being thought that they had probably been admitted with the disease unrecognised. In dealing with the outbreak, swabbing of the contacts was found useless, but in all cases they were advised to use gargles and nasal douches.

POLIOMYELITIS.—No case of this disease was notified during the year.

ENCEPHALITIS LETHARGICA.—Only one case was notified during the year 1932. This was a boy aged 10 years, who, after being out at play all day, retired to bed without complaint. Later that night he became very flushed, appeared very ill, developed a cough and had period of delirium. Seen by his medical attendant next morning, he was notified as Encephalitis Lethargica. A visit was paid the same day by a member of the M.O.H.'s staff who diagnosed Broncho-pneumonia. This boy died after an illness of only 15 to 20 hours' duration.

In one other case where no notification was received, death was attributed to Encephalitis Lethargica. It was impossible to confirm this diagnosis.

ERYSIPELAS.—During 1932 there were 58 notifications and two deaths were attributed to this disease.

DYSENTERY.—During the year 15 cases were notified, all of them occurring at the County Mental Hospital, Rainhill, where they constituted a minor outbreak. The first case occurred in January, 4 cases in February and the maximum number, 9, appeared in March, after which the outbreak subsided, only one, the final case, being notified in April.

The disease, as was to be expected, was of the bacillary type, and in 5 cases where a bacteriological investigation of the causative strain was made, the varieties Flexner and Y were implicated in three and two cases respectively.

All the cases were adult males, two-thirds being over 50 years of age, and, of these, one half were more than 65 years of age.

MALARIA.—No case was notified during the year.

NON-NOTIFIABLE ACUTE INFECTIOUS DISEASES.

During the year, 261 cases of mumps and 353 cases of chicken pox came to the notice of the Health Department. The cases of mumps occurred mainly during the months of June to August, the largest number in any one week being 24 in the week ended the 18th June.

Cases of chicken pox began to appear in June and continued until September, the highest number for any one week being 25 in the week ended the 27th August.

A small epidemic of German Measles occurred co-incidently with the mumps outbreak.

The number of deaths from diarrhoea, etc., in children under 2 years of age was 18. There is no doubt, however, that the majority of these deaths were not due to infective diarrhoea, but resulted from gastric and intestinal disturbances of a non-infectious character.

BOROUGH ISOLATION HOSPITAL.—This hospital is situated at Peasley Cross and has accommodation for 94 beds. It has been the custom in previous years to estimate the number of beds at 136, a figure which allowed for the substitution of 84 cots for half that number of beds.

There are six separate pavilions or blocks for the patients and accommodation is provided for every case of scarlet fever and diphtheria, the policy being to secure as far as possible hospital isolation of all cases of these diseases. In addition, accommodation is available for cases of ophthalmia neonatorum, puerperal fever and puerperal pyrexia and for cases of measles or whooping cough with complications or where nursing cannot be carried out at home. Cases of the less common infectious diseases, e.g., enteric fever, cerebro-spinal meningitis, acute poliomyelitis, &c., are also admitted as occasion arises. The hospital also admits cases of venereal disease requiring hospital treatment.

In these circumstances, it is clear that a very varied assortment of diseases may be found in the hospital at one and the same time, and I would again stress the difficulty, if not the impossibility, of

providing proper isolation of the various infections. Apart from the large wards, there are only four small side-wards or rooms where patients can be isolated. In an infectious diseases hospital of this size and type, small or single room accommodation is constantly and urgently in demand for the following types of cases :—

(1)—Serious cases, which require special attention apart from the routine and noise of a large ward.

(2)—Observation cases, which cannot obviously be admitted to the general ward until the diagnosis is established.

(3)—Mixed cases, e.g., measles and scarlet fever simultaneously affecting one patient.

(4)—Single cases of the less common infections, e.g., encephalitis lethargica, cerebro-spinal meningitis, &c.

(5)—Miscellaneous other cases who, for various reasons, make better progress when nursed apart.

As cases in these various groups form a considerable proportion of those admitted, even rapid manipulation of the present accommodation (which entails a tremendous amount of work) does not in the end afford sufficient protection for the cases to procure an isolation free from risks.

I would recommend, therefore, that the requisite number of isolation compartments or cubicles be provided without delay, and suggest that the most convenient plan would be the conversion of one of the large wards into cubicles. This could be done at a reasonable cost and would not materially interfere with the accommodation ordinarily required for the more common infectious diseases.

Cases are also admitted to this hospital from the Urban Districts of Haydock and Rainford. There is no resident Medical Officer. At the beginning of the year there were 35 patients in hospital. New cases admitted during the year numbered 385, making a total number of 420 patients dealt with. At the end of the year there were 34 patients remaining. The highest number of patients under treatment at any one time was 48, and the lowest 24.

The details of admissions and discharges are shown in Table 16.

Table 16.

Peasley Cross Isolation Hospital.

Hospital Diagnoses of cases treated during 1932.

DISEASE	In hospital Jan. 1st, 1932	Admitted	Discharged	Died	In hospital Jan. 1st, 1933
Scarlet Fever	18	164	161	1	20
Diphtheria	5	63	60	1	7
Puerperal Fever	—	6	5	1	—
Puerperal Pyrexia	—	5	5	—	—
Venereal Disease	1	—	1	—	—
Measles	—	7	5	—	2
Other Diseases	11	132	123	16	4
Mothers with sick babies	—	2	2	—	—
Babies with sick mothers	—	6	5	—	1
Total	35	385	367	19	34

Of 164 cases of scarlet fever admitted, 5 (3.42%) were return cases, that is, cases apparently infected within the arbitrary time limit of 28 days by patients discharged from hospital. In all instances the suspected infecting cases were absolutely clean clinically, i.e., free from sores and discharges from the mucous membranes (nose, throat and ear) at the time of leaving hospital.

On the home being revisited it was discovered that since discharge, 2 of the 5 cases had developed tonsillitis ; two showed small sores inside the nostrils, while the remaining one was apparently clean.

It appears impossible to determine at the time of examination for discharge those cases which are likely to give rise to " returns" and there is no evidence that longer detention in hospital would abolish this menace.

AMBULANCE PROVISION.—Two motor ambulances are kept at the Isolation Hospital to convey patients to any of the Corporation Hospitals, and a Morris Van for the conveyance of bedding, etc. During the year the total distance travelled was 13,559 miles.

Though urgent cases are at all times conveyed to the hospital without delay, there is no regular night ambulance service.

DISINFECTION.—Disinfection of premises by means of formalin sprays is carried out by the disinfectors from the Medical Officer's Department, and bedding and articles of clothing, etc. are disinfected by steam or other appropriate method at the Borough Isolation Hospital. During the year the disinfectors dealt with 1,021 premises, and the numbers of articles disinfected at the Isolation Hospital were as follows :—

	Articles.
Blankets, Sheets and Rugs	6,015
Hospital Clothing and Bedding	4,500
Pillows and Cushions	3,482
Mattresses, etc.	1,018
Other Articles of Clothing	3,706
Library Books	73
Other Articles	2,824

There is no municipal cleansing station, but facilities for the cleansing and disinfection of persons and their belongings are afforded at the Borough Isolation Hospital. School children are also removed to this Institution for compulsory cleansing when required.

IV.—LABORATORY WORK.

The majority of the routine bacteriological and pathological examinations are carried out by the medical staff at the Borough Laboratory at the Town Hall, but bloods for the Wasserman reaction and specimens of an unusual nature are examined at the City Laboratories, Liverpool. Table 17 shows the numbers of specimens dealt with during 1932.

Outfits for the collection of specimens of sputa, blood specimens, throat swabs, etc., are supplied free of charge.

Table 17.

SPECIMENS.	Number Received	Results	
		Positive	Negative
Swabs for Diphtheria	1394	43	1351
Sputa for Tuberculosis	586	145	441
Hairs for Ringworm	23	7	16
Blood for Wasserman Reaction	103	31	72
Films for Gonococci	116	17	99
Pus and other fluids and discharges for various organisms	81	21	60
Total	2303	264	2039

Specimens requiring chemical analysis are dealt with by the Public Analyst at his laboratories.

V.—TUBERCULOSIS.

INCIDENCE.—Particulars of new cases of tuberculosis notified in the area during 1932 are given in Table 18, and the number of new cases each year since 1912 in Table 19.

Table 18.

Particulars of new cases and of deaths during 1932.

Ages	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	Males	Females	Males	Females	Males	Females	Males	Females
Under 1 year	1	—	—	1	1	—	1	1
1 to 5 years	1	1	9	6	1	—	5	2
5 to 10 years	14	10	8	4	—	—	1	—
10 to 15 years	4	9	5	5	1	4	—	—
15 to 20 years	5	13	4	—	3	6	—	—
20 to 25 years	9	10	2	2	10	9	1	1
25 to 35 years	10	7	—	—	3	8	—	2
35 to 45 years	16	5	1	1	6	3	—	—
45 to 55 years	10	6	—	—	5	3	1	—
55 to 65 years	8	—	—	—	5	3	—	1
65 upwards	1	1	—	—	1	—	—	—
Totals	79	62	29	19	36	36	9	7

Table 19.

Number of new cases notified and number of deaths each year, 1912 to 1932.

Year	No. of Primary notifications received.		Deaths		Death Rate per 10,000 of population	
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
1912	130	—	91	65	9.27	6.02
1913	253	164	100	90	10.05	9.0
1914	207	116	113	65	11.2	6.45
1915	203	126	99	56	10.7	6.07
1916	189	137	127	41	14.1	4.5
1917	198	62	121	42	13.3	4.64
1918	144	40	107	34	11.8	3.75
1919	150	56	99	31	9.8	3.08
1920	221	65	82	37	7.9	3.53
1921	179	63	102	32	9.7	3.05
1922	167	58	78	39	7.3	3.66
1923	141	45	85	27	8.0	2.52
1924	154	75	118	27	10.8	2.48
1925	141	88	97	25	8.8	2.28
1926	140	68	91	32	8.2	2.92
1927	129	61	74	22	6.5	1.95
1928	139	68	84	21	7.6	1.90
1929	130	50	91	24	8.3	2.2
1930	119	53	73	26	6.7	2.4
1931	110	67	103	17	9.5	1.6
1932	141	48	72	16	6.7	1.5

At the end of 1932, there remained on the Tuberculosis Register in St. Helens 569 cases of pulmonary and 390 cases of non-pulmonary tuberculosis.

Of the 141 new cases of pulmonary tuberculosis notified during 1932, 31 died during the year and the average duration of life after notification in these cases was 58.8 days. In 11 cases death occurred within one week of notification. Furthermore, of the 72 deaths from pulmonary tuberculosis registered during 1932, 4 were not previously notified as suffering from the disease, and, of the 16 deaths from non-pulmonary tuberculosis, 7 were not previously notified.

From the above figures it will be seen that the lessening incidence of pulmonary tuberculosis in St. Helens as measured by the number of notifications received was temporarily arrested during 1932. The number of notifications received is in fact the highest since 1925, but how far it reflects an increased incidence it is difficult to say. Some increase is not unlikely, but the fact that the increase is mainly in cases between the ages of 5 years and 15 years and the knowledge that a very large number of such cases was notified by one medical officer, suggest that some of the notifications really belong to previous years. As the facts stand at present, I do not consider the increase is cause for any alarm.

It is regrettable that in too many cases notification is still delayed until the disease is in the advanced stage. That 11 cases died within one week of notification is a serious handicap on any efforts to combat the disease. It is hoped that with the installation of a new X-ray plant both practitioners and patients will in future more readily take advantage of the facilities offered at the Dispensary

MORTALITY.—During 1932 there were referable to the borough 88 deaths from all forms of tuberculosis, giving a Tuber-

culosis Death Rate of 8.18 per 10,000 of the population. Of these deaths, 72 were due to pulmonary tuberculosis and 16 to non-pulmonary tuberculosis, giving a pulmonary death rate of 6.69 per 10,000 of the population and a non-pulmonary death rate of 1.49.

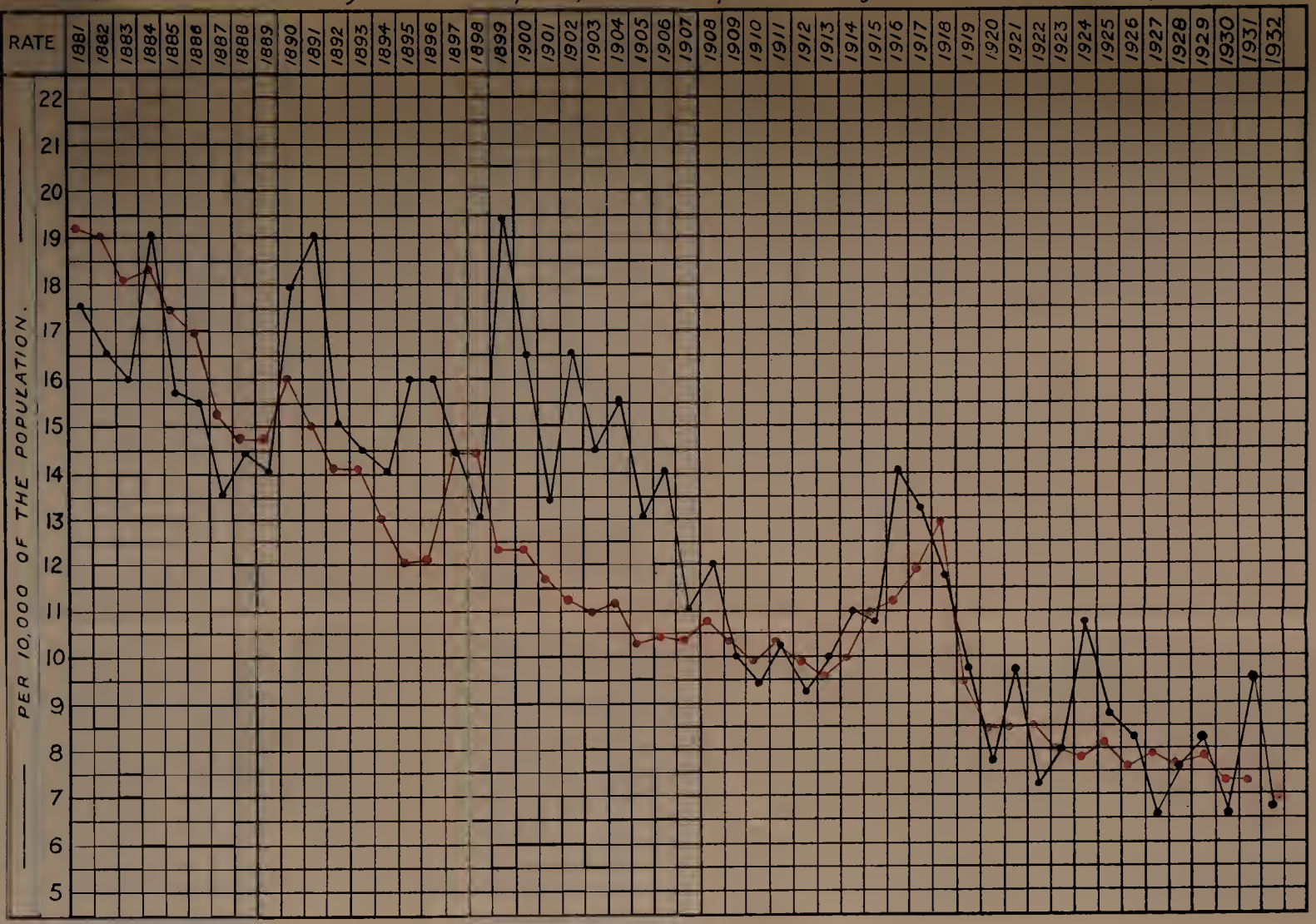
The pulmonary death rate is the second lowest recorded for St. Helens and the non-pulmonary the lowest since notification commenced in 1912.

The ages at which the deaths occurred are shown in Table 9 and the number of deaths and the death rate from each form of the disease each year since 1912 in Table 19.

TUBERCULOSIS DISPENSARY.—The Central Dispensary in Claughton Street, which should be the headquarters for all measures for dealing with tuberculosis, still remains in premises which are not only inadequate but quite unsuitable for the purpose. A tuberculosis dispensary, if it is to encourage patients to attend and is to be not merely a place for examining patients but also a place where the hygiene of health may be taught, should be attractive and an example of all that is best in hygienic principles. This cannot be said of the present premises. Not only are the waiting and dressing rooms small, dark and dismal, but the consulting room has to be used not only as a consulting room but also as the headquarters of the tuberculosis nurse and the clerk in charge of the tuberculosis records. Further, the waiting room has on occasion to be used as a waiting room for school children or for expectant or nursing mothers attending for medicines, and the consulting room is also used as the consulting room for the male venereal diseases clinic.

Accommodation for the X-ray Department is also unsatisfactory. For this reason the installation of a modern plant for diagnostic purposes has been held over for many years in the hope

Death Rates from Pulmonary Tuberculosis per 10,000 of the Population in England & Wales and St. Helens, 1881-1932



Black: St. Helens.
Red: England and Wales.

that new premises would be available, and the recent installation is a partial installation only. It is also at present impossible to instal any artificial sunlight apparatus, though the latter is urgently required for the treatment of lupus and gland cases.

During 1932, five sessions per week were held at the Central Dispensary for ordinary cases and one session weekly for X-ray therapy. A record of the cases dealt with at the Dispensary is shown in Table 21 (a).

Table 21 (a).

	Pulmonary				Non-Pulmonary				Total				Grand Total
	Adults		Children		Adults		Children		Adults		Children		
	M	F	M	F	M	F	M	F	M	F	M	F	
A. *New cases examined (excluding contacts)*													
1. Definitely Tuberculous	49	32	15	11	6	3	20	11	55	35	35	22	147
2. Diagnosis not completed	—	—	—	—	—	—	—	—	7	5	7	10	29
3. Non-Tuberculous	—	—	—	—	—	—	—	—	18	14	26	32	90
B. *Contacts examined*													
1. Definitely Tuberculous	2	—	2	1	—	—	—	1	2	—	2	2	6
2. Diagnosis not completed	—	—	—	—	—	—	—	—	1	1	—	—	2
3. Non-Tuberculous	—	—	—	—	—	—	—	—	13	15	29	21	78
C. *Cases written off Register*													
1. Cured	1	2	—	—	1	—	5	3	2	2	5	3	12
2. Diagnosis not confirmed or Non-Tuberculous	—	—	—	—	—	—	—	—	33	31	61	67	192
D. Number of persons on Register 31st December													
1. Diagnosis completed	160	121	84	91	34	32	129	131	194	153	213	222	782
2. Diagnosis not completed	—	—	—	—	—	—	—	—	8	6	7	10	31

During the year, 266 new cases and 86 contacts were added to the Dispensary Register, and 4 cases were transferred from other areas : 12 cases were discharged from the Register as recovered, 192 were written off as non-tuberculous, 69 died, and 30 were transferred to other areas or were lost sight of. This left at the end of the year 813 persons on the Register. Table 21 (b) shows

the condition at the end of 1932 of all patients remaining on the Dispensary Register.

The numbers of attendances made at the Dispensary were 1,851 at ordinary sessions and 793 at X-Ray sessions, giving a weekly average attendance of 36 and 15 respectively. The number of consultations with medical practitioners was :—

(a)—At the homes of the patients 13

(b)—Otherwise 188

At the X-Ray department 51 cases of tubercular adenitis and 22 cases of tuberculous skin affections made 793 attendances for treatment.

During the year 150 specimens of sputum were examined in connection with the dispensary and 15 found positive.

During the year the tuberculosis officer paid 160 visits to the homes of patients, and in the following-up of cases, 1,581 visits were paid by the tuberculosis nurse, health visitors and orthopaedic nurse. In addition, 826 visits were paid by nurses and health visitors under the Public Health (Tuberculosis) Regulations, 1912.

During 1932, 86 contacts were examined and of these 6 were found to be definitely tuberculous, 2 were doubtfully tuberculous and 78 were non-tuberculous.

It is satisfactory to note that the number of contacts presenting themselves for examination is increasing. It is found that parents more readily ask for the examination of their children but decline examination of themselves as being unnecessary. This is unfortunate as, though the examination of children contacts is of the greatest importance in discovering early curable cases, the examination

Table 21(b).

PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1932 of all patients remaining on the Dispensary Register ; and (b) the reasons for the removal of all cases written off the Register.

The Table is arranged according to the years in which the patients were first entered on the Dispensary Register as definite cases of pulmonary tuberculosis, and their classification at that time.

Condition at the time of the last record made during the year to which the return relates.			Previous to 1926					1926					1927					1928					1929					1930					1931					1932				
				Class T. B. plus					Class T. B. plus					Class T. B. plus					Class T. B. plus					Class T. B. plus					Class T. B. plus					Class T. B. plus					Class T.B. plus			
			Class T. B. minus	Group 1	Group 2	Group 3	Total (Class T. B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1.	Group 2	Group 3	Total (Class T.B. plus).	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. Minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)
(a) Remaining on Dispensary Register on 31st December.	Disease Arrested	Adults M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Adults F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Children	9	—	—	—	—	1	—	—	—	—	—	—	—	—	—	3	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Disease not Arrested	Adults M.	21	3	3	1	7	6	—	—	—	—	3	2	1	—	3	5	1	—	—	1	5	3	1	—	4	5	5	5	—	10	5	2	4	—	6	16	8	14	6	28
		Adults F.	7	—	—	—	—	5	—	—	—	—	1	—	—	—	—	2	—	—	—	—	5	—	—	—	—	7	2	1	—	3	12	2	1	1	4	10	6	8	6	20
		Children	1	—	—	—	—	12	—	—	—	—	9	1	—	—	1	13	—	—	—	—	10	—	—	—	—	14	—	—	—	—	9	—	—	—	—	29	—	1	—	1
	Condition not ascertained during the year.		39	5	1	—	6	15	1	2	1	4	19	1	1	—	2	25	1	—	—	1	5	1	—	—	1	10	2	3	—	5	5	—	1	—	1	—	—	—	—	—
	Total on Dispensary Register at 31st December.		78	8	4	1	13	39	1	2	1	4	32	4	2	—	6	49	2	—	—	2	28	4	1	—	5	36	9	9	—	18	31	4	6	1	11	55	14	23	12	49
(b) Not now on Dispensary Register and reasons for removal therefrom.	Discharged as Recovered	Adults M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Adults F.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Children	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Lost sight of or otherwise removed from Dispensary Register.		8	—	1	1	2	3	1	—	—	1	2	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1	2	1	—	—	1	1	—	—	—	—
	Dead	Adults M.	1	1	1	2	4	1	—	—	—	—	2	—	—	—	—	1	—	—	—	—	2	—	1	—	1	2	1	—	1	2	2	2	—	4	6	—	—	1	8	9
		Adults F.	2	—	1	—	1	1	—	—	—	—	2	—	—	—	—	1	—	—	2	2	1	—	—	—	—	1	2	—	—	2	1	4	—	2	6	1	—	1	4	5
		Children	—	—	1	—	1	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	2	—	—	2	—	—	—	—	—
	Total written off Dispensary Register		14	1	4	3	8	5	1	—	—	1	6	-	1	—	1	2	—	—	2	2	4	—	1	—	1	3	4	—	2	6	5	9	—	6	15	2	—	2	12	14
GRAND TOTALS			92	9	8	4	21	44	2	2	1	5	38	4	3	—	7	51	2	—	2	4	32	4	2	—	6	39	13	9	2	24	36	13	6	7	26	57	14	25	24	63

NON-PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1932 of all patients remaining on the Dispensary Register ; and (b) the reasons for the removal of all cases written off the Register.

Condition at the time of the last record made during the year to which the return relates.			Previous to 1926					1926					1927					1928					1929					1930					1931					1932				
			Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total	Bones and Joints	Abdominal	Other Organs	Peripheral Glands	Total
(a) Remaining on Dispensary Register on 31st December.	Disease Arrested	Adults M.	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	—	—	—
		Adults F.	1	—	—	—	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	2	—	2	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
		Children	10	1	8	13	32	12	1	4	4	21	4	2	—	5	11	4	—	—	7	11	2	—	—	5	7	—	—	—	6	6	—	—	—	1	1	—	—	—	—	—
	Disease not Arrested	Adults M.	—	—	—	—	—	—	—	1	—	1	—	—	1	—	1	—	—	—	—	—	1	—	2	—	3	—	—	—	—	—	—	1	—	—	1	1	2	2	1	6
		Adults F.	—	—	1	—	1	—	—	1	—	1	—	—	—	—	—	1	—	—	2	3	1	—	—	—	1	2	—	—	1	3	2	—	1	—	3	1	—	1	1	3
		Children	1	—	6	3	10	3	—	1	1	5	3	—	—	—	3	2	—	2	4	8	4	3	1	6	14	4	2	4	18	28	3	—	1	15	19	4	4	4	22	34
	Condition not ascertained during the year.		7	4	4	7	22	8	3	4	4	19	6	2	1	6	15	2	1	1	6	10	2	—	1	1	4	1	1	2	1	5	1	—	1	4	6	—	—	—	—	—
	Total on Dispensary Register at 31st December.		19	5	20	23	67	23	4	11	9	47	13	4	2	12	31	9	1	3	19	32	10	3	6	12	31	7	3	6	28	44	6	1	3	21	31	6	6	7	24	43
Transferred to Pulmonary			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) Not now on Dispensary Register and reasons for removal therefrom.	Discharged as Recovered	Adults M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Adults F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Children	1	—	2	3	6	—	—	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Lost sight of, or otherwise removed from Dispensary Register		3	—	—	—	3	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	1	—	—	1	2	1	—	—	—	1
	Dead	Adults M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—
		Adults F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—
		Children	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	1	—	—	1
	Total written off Dispensary Register		4	—	3	3	10	—	—	1	—	1	—	—	—	1	1	—	—	—	1	1	—	—	—	1	1	2	—	1	—	3	1	1	—	1	3	1	1	—	—	2
GRAND TOTALS of (a) and (b) (excluding those transferred to Pulmonary).			23	5	23	26	77	23	4	12	9	48	13	4	2	13	32	9	1	3	20	33	10	3	6	13	32	9	3	7	28	47	7	2	3	22	34	7	7	7	24	45

of adult contacts is of as great, if not greater importance, in that it is among these that the hidden source of infection is so frequently discovered.

Re-examinations are carried out as and when circumstances indicate, and school children contacts are kept under supervision by the School Medical Service. Doubtful cases are frequently admitted to the Sanatorium for special observation.

Home disinfection of premises and bedding was carried out in 843 instances, being an increase of 207 as compared with the previous year.

There are no arrangements under the Tuberculosis Scheme for the provision of Home Nursing in St. Helens, but many of the cases are dealt with by the St. Helens and District Nursing Association. Shelters are not provided in St. Helens.

During the year no case has come to notice in which action was required under the Public Health (Prevention of Tuberculosis) Regulations, 1925, (control of tuberculous persons employed in the milk trade), nor has it been necessary to obtain compulsory removal to hospital of any patient under the Public Health Act, 1925, Section 62.

NON-PULMONARY TUBERCULOSIS.—During 1932, 73 patients suffering from tuberculous glands or from lupus made 793 attendances at the Dispensary for X-Ray treatment. As mentioned in previous Reports, this form of treatment has in modern practice been superseded by violet ray therapy which is quicker and more efficacious. This is especially so in the case of lupus, many cases of which at present seek treatment at Liverpool, Manchester or elsewhere. The present Dispensary premises are, however,

very unsuitable for an ultra violet light installation and the urgent need for such an installation provides a further argument for the provision at an early date of new premises equipped with all up-to-date apparatus.

Out-patient treatment for bone and joint tuberculosis in children is provided as part of the combined Orthopaedic Scheme of the Tuberculosis, Maternity and Child Welfare, and School Medical Services. In-patient treatment is provided by the use of beds at the Leasowe Open-Air Hospital for Children or the Heswall branch of the Royal Liverpool Children's Hospital. For this purpose the average number of beds retained has been eight. Occasionally also, such cases have been admitted to Eccleston Hall Sanatorium.

There is still no definite scheme for dealing with bone and joint tuberculosis in persons over 16 years of age, and I would suggest that provision for in-patient treatment should be made by the reservation of a small number of beds at a properly equipped orthopaedic hospital.

During the year, patients suffering from the following types of disease received in-patient treatment at one or other of the hospitals mentioned :—

Bones and Joints	18
Abdominal	2
Glandular	2
Other organs	2

A record of the work carried out during 1932 under the Orthopaedic Scheme is shown in Table 22. The supply and repair of splints and appliances is undertaken by the St. Helens Crippled and Invalid Children's Aid Society.

Table 22.

Record of work under Orthopaedic Scheme during the year 1932.

	Cases of Tuberculosis	Maternity and Child Welfare Cases	Non-tubercular School Children
Number of Cases dealt with during the year	48	178	361
Number who ceased to attend or attended for Consultation only	—	13	22
Number Discharged Cured or Improved	—	8	11
Died	—	1	1
Cases transferred to Education Account	—	30	—
Cases transferred to Tuberculosis Account	—	—	1
Number of Cases remaining under Treatment at end of 1932	48	156	327
Attendances to see Orthopaedic Surgeon	123	233	433
Attendances for intermediate treatment	411	1293	3402
Visits to Homes by Orthopaedic Nurse	126	30	205
Cases treated in Royal Liverpool Children's Hospital :— Myrtle Street.....	—	5	13
Heswall	2	1	11
Cases treated in Leasowe Open-Air Hospital for Children	9	—	—
Cases treated in David Lewis' Northern Hospital	—	—	2
Cases treated in Liverpool Royal Infirmary	—	—	—
Cases treated in Eccleston Hall Sanatorium	3	—	—
Total number of days of Institutional Treatment	2979	204	2088

Table 23,

Return showing the immediate results of treatment of patients and of observation of doubtful cases discharged from Residential Institutions during the year 1932.

Classification on admission to the Institution		Condition at time of discharge	Duration of Residential Treatment in the Institution.															Grand Total
			Under 3 months			3—6 months			6—12 months			More than 12 months			Totals			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis	Class T.B. minus.	Quiescent	2	1	4	4	1	4	2	1	5	1	...	9	9	3	22	34
		Not Quiescent	2	4	2	2	1	5	...	...	...	...	...	2	4	5	9	18
		Died in Institution	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
	Class T.B. plus Group 1	Quiescent	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1
		Not Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
	Class T.B. plus Group 2	Quiescent	...	...	...	...	...	...	1	...	...	1	1	...	2	1	...	3
		Not Quiescent	3	2	...	3	2	...	2	2	...	2	1	1	10	7	1	18
		Died in Institution	...	...	...	...	...	...	...	1	...	1	1	...	1	2	...	3
	Class T.B. plus Group 3	Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not Quiescent	1	2	...	4	2	...	1	1	...	1	...	...	7	5	...	12
		Died in Institution	6	4	1	3	...	...	...	1	...	4	1	...	13	6	1	20
Non-Pulmonary Tuberculosis	Bones and Joints	Quiescent	...	...	...	...	...	1	...	...	2	...	...	...	...	...	3	3
		Not Quiescent	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
		Died in Institution	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
	Abdominal	Quiescent	1	...	...	...	1	...	...	...	...	...	...	...	1	1	...	2
		Not Quiescent	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
		Died in Institution	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
	Other Organs	Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Peripheral Glands	Quiescent	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
		Not Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Diagnosis on discharge from observation.	For Pulmonary Tuberculosis						For Non-Pulmonary Tuberculosis						Totals		
	Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	...	...	2	...	...	11	...	...	...	...	...	...	...	...	13
Non-tuberculous	1	1	1	...	2	3	...	...	...	...	...	...	1	3	4
Doubtful	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
TOTALS	1	1	4	...	2	14	...	...	...	...	...	...	1	3	18

§ PULMONARY TUBERCULOSIS : Patients suffering from this disease are now divided into two classes, viz : *Class T.B. minus*, which comprises those patients in whose sputum tubercle bacilli have never been found : *Class T.B. plus* which comprises those cases in which tubercle bacilli have at any time been found.

Class T.B. plus is further sub-divided into three groups. *Group* 1 comprises early cases who will probably have their disease arrested by a period of Sanatorium treatment. *Group* 3 includes advanced cases and cases with grave complications, *e.g.*, diabetes and *tuberculosis* of larynx or intestine. *Group* 2 includes all cases of Class T.B. plus who cannot be placed in groups 1 and 3.

DENTAL TREATMENT.—In-patients at Eccleston Hall Sanatorium are examined regularly by the dental surgeon and minor treatments such as extractions, fillings, etc., are carried out and in special cases dentures are supplied. There is no special scheme for dealing with patients attending the Dispensary but urgent cases are from time to time referred to the dental surgeon for treatment.

INSTITUTIONAL TREATMENT.—Institutional treatment for cases of tuberculosis in St. Helens is provided as follows :—

(a)—Eccleston Hall Sanatorium :—maintained by the St. Helens Corporation. This institution contains 70 beds with accommodation for approximately 28 men, 18 women, and 24 children. The institution is primarily for pulmonary tuberculosis, but non-active non-pulmonary cases are admitted as and when necessary. Though originally intended for sanatorium treatment only, it has been found necessary to use this institution also for advanced cases, the proportions being approximately equal. There is a Sanatorium School for children in-patients.

(b)—Four beds are reserved at the Liverpool Sanatorium, Delamere, for early pulmonary cases.

(c)—Seven beds are reserved at the Leasowe Open-Air Hospital for Children for non-pulmonary cases.

(d)—Occasional beds are taken as and when required for special cases at various institutions.

The average number of beds available during 1932 was as follows :—

	Pulmonary Tuberculosis	Non-Pulmonary Tuberculosis	Total
Adults	48	2	50
Children under 15 ...	18	12	30
Totals	66	14	80

The above figures do not, however, include beds available for Poor Law cases in the Whiston Infirmary, Prescot. That Institution has 60 beds for tuberculosis available for pulmonary or non-pulmonary as required. Non-pulmonary cases under 15 years of age are accommodated in the general wards.

Table 23 shows the immediate results of treatment of patients discharged from residential institutions during the year, and Table 24 shows the extent of institutional treatment provided.

TABLE 24.

Institutional Treatment during the year 1932.

(a)—in Non-Poor Law Institutions.

		In Institutions on Jan. 1	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31
Number of doubtfully tuberculous cases admitted for observation	Adult Males	—	1	1	—	—
	Adult Females	—	3	3	—	—
	Children	2	18	18	—	2
	Total	2	22	22	—	2
Number of definitely tuberculous patients admitted for treatment.	Adult Males	32	46	34	14	30
	Adult Females	14	36	23	11	16
	Children	32	35	37	2	28
	Total	78	117	94	27	74
Grand Total		80	139	116	27	76

(b)—in Poor Law Institutions.

		In Institutions on Jan. 1.	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31
Number of patients suffering from pulmonary tuberculosis	Adult Males	6	14	12	3	5
	Adult Females	5	6	4	4	3
	Children	—	—	—	—	—
	Total	11	20	16	7	8
Number of patients suffering from non-pulmonary tuberculosis.	Adult Males	1	2	1	—	2
	Adult Females	1	1	2	—	—
	Children	1	5	4	1	1
	Total	3	8	7	1	3
Grand Total	.....	14	28	23	8	11

VI.—VENEREAL DISEASES.

Treatment is carried out by the Staff of the Medical Officer's Department, female cases being dealt with by the female assistant medical officer. Bacteriological examinations are carried out at the Liverpool University.

During the year, 64 males and 77 females were treated at the centre and made a total of 3,330 attendances. No case required in-patient treatment. Table 25 gives further particulars regarding these cases.

Table 26 shows the number of new cases dealt with at the Centre since 1923. It will be noted that apart from some increase in the years 1926, 1927, 1928 and 1929, there has been a gradual diminution in the number of cases of syphilis in males attending the Centre, and, as reports received from other districts regarding St. Helens cases treated at other centres show a similar decrease, it would appear that the decrease is an actual one. Further, it would appear that with the exception of the years mentioned, there has been also a diminution in the number of cases of gonorrhoea in males. In females, however, the decrease in cases of syphilis is not so marked and there has been an actual increase in the number of cases of gonorrhoea. Though it is difficult to make any definite statement regarding the incidence of venereal disease in females on the figures of voluntary attendance at the Centre, I am of opinion that the increase shown is very largely due to an increased number of attendances at the Centre mainly resulting from increased attention being paid to this subject at the ante-natal clinics.

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
Number of cases on 1st January under treatment or observation	7	15	—	—	9	8	—	—	16	23	39
Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	2	4	—	—	2	1	—	—	4	5	9
Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4)	2	11	—	—	23	21	17	17	42	49	91
Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection	1	—	—	—	1	—	—	—	2	—	2
Totals of Items 1, 2, 3 and 4.....	12	30	—	—	35	30	17	17	64	77	141
Number of cases discharged after completion of treatment and final tests of cure (see Item 15)	—	—	—	—	7	—	17	15	24	15	39
Number of cases which ceased to attend before completion of treatment.	1	5	—	—	—	—	—	—	1	5	6
Number of cases which ceased to attend after completion of treatment but before final tests of cure (see Item 15)	1	—	—	—	13	—	—	—	14	—	14
Number of cases transferred to other centres or to institutions, or to care of private practitioners	1	2	—	—	4	2	—	—	5	4	9
Number of cases remaining under treatment or observation on 31st December	9	23	—	—	11	28	—	2	20	53	73
Totals of Items 5, 6, 7, 8 and 9..... .... (These totals should agree with those of Items 1, 2, 3 and 4)	12	30	—	—	35	30	17	17	64	77	141
Number of cases of syphilis included in Item 6 which failed to complete one course of treatment	1	3	—	—	—	—	—	—	1	3	4
Number of attendances— (*a*) for individual attention of the medical officers	136	316	—	—	174	73	38	62	348	451	799
(*b*) for intermediate treatment, e.g., irrigation, dressing	—	—	—	—	1568	866	34	63	1602	929	2531
TOTAL ATTENDANCES	136	316	—	—	1742	939	72	125	1950	1380	3330

Table 25—continued.

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
12. In-patients :—										
(*a*) Total number of persons admitted for treatment during the year	—	—	—	—	—	—	—	—	—	—
(*b*) Aggregate number of "in-patient days" of treatment given	—	—	—	—	—	—	—	—	—	—

	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	—	—	—	—	—	1	—	2	—	3

TABLE 26.

Number of Cases of Venereal Diseases dealt with for the first time during the years 1923 to 1932.

Year	Syphilis		Soft Chancre		Gonorrhoea	
	Males	Females	Males	Females	Males	Females
1923	18	11	—	—	34	2
1924	19	15	—	—	30	9
1925	14	29	1	—	26	4
1926	36	40	2	—	33	9
1927	32	39	4	—	42	14
1928	44	26	3	—	62	11
1929	22	25	2	—	55	14
1930	16	32	1	—	40	14
1931	6	13	—	—	22	16
1932	3	11	—	—	24	21

VII.—SUMMARY (for reference) of Nursing Arrangements, Hospitals, and other Institutions available for the district.

HOME NURSING.—The St. Helens and District Nursing Association, supported by voluntary contributions, maintain a superintendent, assistant superintendent and fifteen nurses to attend non-infectious cases in their own homes. 2,515 cases were nursed during the year, the total number of visits amounting to 72,855.

Arrangements are also in operation for the Association to undertake for the Corporation the home nursing of cases of ophthalmia neonatorum, puerperal fever and puerperal pyrexia, and cases of measles and whooping cough in children under 5 years of age. Under these arrangements the Association made, during the year, a total of 320 visits to 6 cases of measles, 2 cases of ophthalmia neonatorum, 1 maternity case and 6 other cases.

MIDWIVES.—No district midwives are employed or subsidised by the public health authority. In exceptional cases, however, where the patient has been unable to do so by reason of poverty, the Council have paid the midwife's fee.

CLINICS AND TREATMENT CENTRES.—The following clinics and treatment centres are provided by the Corporation :

(1).—**Maternity and Child Welfare Centres**—Combined clinics for expectant and nursing mothers and for children under 5 years of age.

(a) Town Hall Centre.....Open, Monday, Wednesday and Thursday, 2 to 4 p.m. For North and South Windle, Hardshaw, Derbyshire Hill and Parr Districts.

(b) Albion Street Clinic .....Open Tuesday and Friday, 2 to 4 p.m. For North and South Eccleston and Central Districts.

(c) Elizabeth St. Clinic .....Open Tuesday, 2 to 4 p.m. For Peasley Cross and Sutton Districts.

(d) Gartons Lane Clinic Open Wednesday, 3 to 4 p.m. For Marshalls Cross, Sutton Manor and Clock Face Districts.

(e) West Street Clinic .....Open Thursday, 3 to 4 p.m. For Thatto Heath District.

(2).—**Ante-natal Clinics**—For ante-natal cases only.

(a) Town Hall Centre .....Tuesday, 2 to 4 p.m., and Friday, 2 to 4 p.m.

(b) Elizabeth Street Maternity and Child Welfare Centre .....Thursday, 10 to 11 a.m.

(c) Gartons Lane Centre Wednesday, 2 to 3 p.m.

(d) West Street Centre .....Thursday, 2 to 3 p.m.

(3).—**Gynæcological Clinic.**—For diseases or disablements associated with child-bearing.

Town Hall Centre.....Tuesday, 11 to 12 noon.

(4).—**School Clinic, Claughton Street.**—For treatment of minor ailments, throat and nose defects, eyes, dental defects and the X-ray treatment of ringworm. Minor ailments are treated daily from 9 a.m. to 5 p.m., and other defects on special days. A scale of income has been drawn up for recovery of cost of treatment in non-necessitous cases.

District Clinics for the treatment of minor ailments are also open for a few hours daily at Derbyshire Hill, Sutton, Sutton Manor and Thatto Heath, and, after school dental inspection, Dental Clinics are held at Sutton, Sutton Manor and Thatto Heath for varying periods.

(5).—**Tuberculosis Dispensary, Claughton Street.**—Open Monday from 10 to 11-30 a.m., Wednesday from 5-30 to 7-0 p.m. Thursday from 3 to 4-30 p.m., and Friday from 10 to 11-30 a.m. and from 6 to 7 p.m.

(6).—**Venereal Diseases Centre, Claughton Street.**—Open for males on Monday, 5-30 to 7 p.m., and for females, Wednesday, 5-30 to 7 p.m. The centre is also open daily from 9 a.m. to 5 p.m. on Monday to Friday, and to 12 noon on Saturday, for irrigation, advice and prophylactic treatment.

(7).—**Orthopaedic Clinic.**—At the Maternity and Child Welfare Centre, Albion Street. Orthopaedic Surgeon attends on 2nd and 4th Wednesdays of each month, from 2 p.m. to 4 p.m. Intermediate treatments are given by the orthopaedic nurse four days per week at Albion Street Clinic, and one day per week at the Elizabeth Street Maternity and Child Welfare Centre.

HOSPITALS.—

Provided by the Council :—

(1)—Borough Isolation Hospital, Peasley Cross. For Infectious Diseases (other than smallpox). Beds : 94. Resident staff : matron and 23-25 nursing staff. Admissions and discharges are under the control of the Medical Officer of Health, but patients are treated by their own medical practitioners. The Corporation provide specialist services in necessitous cases when required. Cases also admitted from the Haydock and Rainford Urban District Councils. A separate pavilion is reserved for cases of puerperal fever and puerperal pyrexia and for cases of ophthalmia neonatorum, and a small ward is reserved for cases of venereal disease.

(2)—Eccleston Hall Sanatorium. For Pulmonary and convalescent or non-active Non-Pulmonary Tuberculosis. Total Beds : 70. Resident Staff : One medical officer, sister-in-charge and 15 nursing staff. Non-resident female teacher. Orthopaedic surgeon visits periodically. Cases not exceeding four in number are admitted from the Lancashire County Council.

(3)—The St. Helens Maternity and Child Welfare Hospital, Cowley Hill. For Maternity cases and for Ailing and Debilitated Children. Beds : maternity, 15 ; ailing and debilitated children, 22. Resident staff : medical officer, matron, and 14 nursing staff.

Subsidised by Council :—

(1)—Sankey Smallpox Hospital for cases of smallpox. St. Helens pays an annual retaining fee to the Warrington Corporation and the costs of treatment of any patient admitted from St. Helens.

(2)—Whiston Infirmary, Prescot. Transferred from the Prescot Board of Guardians to the Lancashire County Council under the Local Government Act, 1929.—Total Beds available (including maternity and mental) : 706, divided approximately :—

Medical	243
Surgical	62
Children	100
Maternity	25
Tuberculosis	60
Mental	216
	706

The hospital has an up-to-date X-Ray installation and artificial sunlight apparatus. There is one resident medical officer and one non-resident, with a visiting oculist, visiting dentist and visiting orthopaedic surgeon, while the medical superintendent has authority to call in any specialist or consultant assistance if he wishes. The pathological work is carried out at the County Mental Hospital, Rainhill. The infirmary is used almost entirely for the reception of Poor Law cases, though a small percentage of private cases is admitted. By an arrangement with the Lancashire County Council, all Poor Law cases from St. Helens are admitted to this Institution.

Other Hospitals.—*The St. Helens Hospital.*—Supported partly by subscribers and partly by contributions. For all medical and surgical non-infectious cases. Also 17 beds for maternity cases. Total accommodation about 135 beds. Out-patient department for Ophthalmic, Ear, Throat and Nose, and Gynaecological cases.

The Providence Free Hospital.—Accommodation for about 130 patients (general medical and surgical cases).

Ambulance facilities.—For infectious cases, two ambulances are maintained by the Corporation at the Peasley Cross Isolation Hospital. Both general hospitals maintain ambulances and these are used when required. The Police also maintain an ambulance for street accident cases.

VIII.—MATERNITY AND CHILD WELFARE.

NOTIFICATION OF BIRTHS.—Under the Notification of Births Acts, 2,213 live births and 105 still-births were notified during the year. For these, 2,123 notifications were received from midwives and 195 from doctors. The total number of births belonging to St. Helens for the year was 2,160 as compared with 2,178 in 1931, and the birth rate for the two years was the same, namely 20.1 per 1,000 of the population.

INFANT MORTALITY.—During 1932, 2,160 births were registered for St. Helens, and the deaths of 193 infants under one year of age occurred, giving an infant mortality rate of 89.4 per 1,000 births as compared with 88.2 for the previous year. Of the 193 deaths under one year, 189 were legitimate children and 4 illegitimate children, giving a legitimate infant mortality rate of 89.3 per 1,000 legitimate births and an illegitimate infant mortality of 90.9 per 1,000 illegitimate births. The infant mortality for England and Wales was 65 per 1,000 births, and for the 118 County Boroughs and Great Towns 70 per 1,000 births.

The principal causes of the deaths in 1932 were as follows :—

Congenital debility, malformations and premature birth	92
Pneumonia	37
Bronchitis and other respiratory diseases	17
Diarrhoea, etc.	16
Tuberculosis	3
Measles	—
Due to Violence	2
Influenza	4
Other Causes	22
	193

The following statement reviews the infant death rates per 1,000 births under the principal causes in the years 1927 to 1932.

	Infant Mortality per 1,000 Births.					
	1927	1928	1929	1930	1931	1932
Congenital Debility, malformation and premature birth	43.66	44.49	39.39	39.27	41.32	42.59
Pneumonia, Bronchitis and other respiratory diseases	16.95	24.53	32.32	17.07	19.74	25.00
Measles and Whooping Cough	4.23	6.65	7.53	2.99	3.21	—
Diarrhoea, etc	7.20	7.90	6.65	4.26	3.67	7.41
All other Diseases	16.10	14.97	27.89	16.21	20.21	14.35

The ages at which these deaths occurred during the past five years are shown in the following statement :—

	Infant Mortality per 1,000 Births.				
	1928	1929	1930	1931	1932
Deaths under 1 day old	13.30	15.05	13.23	16.99	14.83
Deaths 1 to 7 days old	15.80	13.28	13.23	13.77	14.83
Deaths 1 to 4 weeks old	18.71	15.05	14.08	10.56	9.72
Total mortality under 1 month old,..... *i.e.*, neo-natal deaths	47.81	43.38	40.54	41.32	39.38
Deaths 4 weeks to 3 months old	15.38	15.05	10.67	11.02	19.91
Deaths 3 to 6 months old	12.47	18.15	13.65	13.33	10.65
Deaths 6 to 12 months old.....	22.87	37.19	14.94	22.48	19.44

It will be noted that there has been a slight increase in the infant mortality for 1932 as compared with the previous year, and that this increase was most marked at the ages 4 weeks to 3 months, being due to pneumonia, bronchitis and other respiratory diseases, and diarrhoeal causes. Though none of the increases can by themselves be considered serious, the facts emphasise the importance of the close supervision required during the early months of child life.

It is pleasing to note the decrease in the neo-natal mortality during recent years, suggestive of the good results obtainable through increased activities in the ante-natal care of the mother.

STILL-BIRTHS.—The number of still-births registered during the year was 104 and all were notified under the Notification of Births Acts.

MATERNAL DEATHS.—During 1932, 9 deaths were registered as resulting from diseases or accidents of pregnancy and childbirth, giving a maternal mortality rate of 4.2 per 1,000 live births. The corresponding mortality rate for 1931 was 3.2.

As in previous years, however, this figure does not include all deaths which might truly be attributed to child-bearing. As a result of special enquiries which were made into all deaths occurring in pregnant women, one further death was discovered. This had been registered as due to cardiac failure and pluerisy but, as the patient was seven months pregnant, there is no doubt that the pregnancy had considerable influence on the fatal result. If this death be included, the total number of maternal deaths for St. Helens should be taken as 10, giving a true maternal mortality rate of 4.6 per 1,000 live births as compared with a corresponding rate of 4.1 in 1931.

The investigation commenced some years ago into the true causes of maternal deaths has been carried on in St. Helens, and an analysis of the 10 deaths in 1932 shows the true causes of death to have been as follows :—

Puerperal Septicaemia	2
Toxaemia of Pregnancy	2
Placenta praevia	2
Post-partum haemorrhage following adherent placenta	2
Shock following abortion	1
Cardiac disease and pleurisy	1
	10

Of the 2 deaths due to puerperal sepsis, 1 occurred in a patient in whom manual removal of the placenta was necessary and septicaemia developed on the fifth day after delivery. The other death due to sepsis followed a miscarriage in the early months of pregnancy subsequent to an attack of acute influenza.

Of the 2 deaths due to toxaemias of pregnancy, one was a case of persistent vomiting and one a case of albuminuria occurring in women five and seven months pregnant respectively. These

patients did not consult any doctor until the toxaemia was well advanced and even then refused hospital treatment until too late. These 2 deaths might have been avoided with proper treatment and emphasise the importance of reliable supervision during pregnancy and the necessity for hospital accommodation so that energetic treatment can be carried out at the earliest.

It is significant that 6 out of the 10 maternal deaths occurred before full term was reached, and this again demonstrates the importance of ante-natal supervision.

In addition to the above cases, one woman died of septicaemia following an illegal operation performed by a woman without any medical or midwifery experience. There is no doubt that her action was the immediate cause of the patient's death and the case shows the very serious results that may result from unnatural interference. Legal proceedings were instituted and she was sentenced to three months' imprisonment.

INFECTIOUS DISEASES IN MOTHERS AND CHILDREN.—

Puerperal Fever and Puerperal Pyrexia.—6 cases of puerperal fever and 8 cases of puerperal pyrexia were notified, and 2 deaths were registered as occurring from puerperal sepsis. The corresponding figures for 1931 were 7 cases of puerperal fever and 8 cases of puerperal pyrexia, with 2 deaths.

The subsequent diagnoses of the 14 cases notified were as follows :—

Pelvic infection	4
Puerperal fever following removal of adherent placenta	1
Puerperal fever following abortion	2
Acute mastitis	2
Constipation	2
Broncho pneumonia	1
Pulmonary tuberculosis	1
Cardiac disease	1
	14

That at least half of the cases notified were definitely septic in character and that two deaths occurred from this cause, shows the need for the strictest asepsis in the conduct of the confinement. Further, that two of the cases were subsequent to abortion emphasises the importance of treating abortion cases under the same strict rules of asepsis as should be carried out at a confinement.

For these cases, beds are available at the Isolation Hospital and trained nurses are supplied on request for home nursing. Of the cases notified, 11 were treated at the Isolation Hospital and in three cases home nursing was provided by the Council.

Ophthalmia Neonatorum.—7 cases were notified during the year. Three cases were treated at the Isolation Hospital, two cases were treated at home under the Council's arrangements with the District Nursing Association, and the other two were treated by the mothers under the supervision of the doctor in attendance. All recovered with vision unimpaired.

Measles and Whooping Cough.—43 cases of measles in children under 1 year old and 164 cases in children aged 1 to 5 years were notified during the year. Only one death occurred, and that in the age group 1 to 5 years, as compared with 7 deaths under 1 year old and 19 deaths in the age group 1 to 5 years during 1931.

52 cases of whooping cough were notified in children under 1 year old and 191 cases in children aged 1 to 5 years. 4 deaths from this disease occurred in the latter age group.

By arrangement with the St. Helens and District Nursing Association, home nursing of these cases can be carried out by the district nurses, and beds are available at the Isolation Hospital for cases requiring hospital accommodation. During the year the services of the district nurses were asked for in only 6 cases of measles and 2 cases of whooping cough, and 1 case of measles was admitted to the Isolation Hospital.

Other Infectious Diseases.—Table 27 shows the number of cases of infectious diseases which occurred in children under 5 years of age.

Table 27.

Infectious Diseases at ages 0—1 and 1—5 years.

	1932	
	Under 1 Year.	1—5 yrs.
Scarlet Fever	2	49
Diphtheria	1	26
Pneumonia	26	114
Erysipelas	—	—
Poliomyelitis	—	—
Cerebro Spinal Fever	1	8
Whooping Cough	52	191
Measles	43	164
Polio-Encephalitis	—	—
Tuberculosis (Pulmonary)	1	2
,, (Non-Pulmonary)	1	15
Opththalmia Neonatorum	7	—

INSPECTION AND SUPERVISION OF MIDWIVES.—

There were 57 midwives on the register as practising in the Borough during the year, of whom two were resident at the St. Helens Hospital, and nine at the Council's Maternity and Child Welfare Hospital.

The qualifications of these midwives were as follows :—

Holding the certificate of the Central Midwives' Board	47
Having other recognised certificates	8
Untrained	2

Inspections of midwives were carried out on 78 occasions by medical officers, and the health visitors paid 58 routine and 55 special visits for purposes of inspection and supervision. In 7 instances it was considered necessary to suspend a midwife from practice for 24 hours after contact with an infectious case to allow of the disinfection of herself and her appliances.

During the year the private midwives found it necessary to call medical practitioners to their assistance on 543 occasions. The reasons for sending and the number of occasions in which medical assistance was required were as follows :—

Number of cases attended by private midwives	1,680	
Number and percentage in which medical assistance was obtained	543	(32.3%)

Reasons for medical assistance :—

(a) For abortions and premature labours	40	(2.4%)
(b) For ante-natal illnesses	40	(2.4%)

(c) For difficult confinement	244	(14.5%)
(d) For suturing the perineum, expelling the placenta, excessive haemorrhage, etc.	126	(7.5%)
(e) For post-natal illnesses	39	(2.3%)
(f) For the child	54	(3.2%)

Compared with the previous year, there was in 1932 a slight increase (from 29.7% to 32.3%) in the percentage of cases in which medical assistance was called in by midwives, and the increase was mainly in calls for assistance in cases of difficult labour or for suturing the perineum, expelling the placenta, or haemorrhage. Examination of the records shows that in some cases the length of time elapsing between the onset of labour and the sending for medical assistance is short and does not give the mother full opportunity to deliver herself in the normal way. This desire to hurry the confinement should be guarded against. Provided there are no abnormalities and the patient is not becoming unduly tired, there is no one who can conduct the delivery better than the mother herself, and the risk of damage to the parts or the introduction of sepsis are enormously decreased.

During the financial year 1932-33, £746/8/0 was paid to medical practitioners for these services, and £243/9/2d. was re-charged to the patients.

HEALTH VISITING.—The following statement shows the visits paid by health visitors during the year.

To expectant mothers :—	
(a) First visits	473
(b) Subsequent visits	389
To infants under one year :—	
(a) First visits	2,509
(b) Subsequent visits	13,480
To children, aged one to five years	19,651
Total Visits	36,502

MATERNITY AND NURSING HOMES.—There are only three maternity homes registered in St. Helens under the Nursing Homes Registration Act, 1927. These have been periodically inspected and found to be satisfactory.

MATERNITY AND CHILD WELFARE AND ANTE-NATAL CLINICS.—At the Maternity and Child Welfare Centres, combined clinics for expectant and nursing mothers and for children under 5 years of age are conducted at eight sessions weekly, and special ante-natal clinics are held five times weekly at four centres. The average attendance per session was 71 children at the maternity and child welfare clinics and 17 cases at the special ante-natal clinics. It is interesting to note that the children attending for the first time during the year represented 64% of the live births for the year.

The child welfare clinics are primarily for the instruction of mothers in the care and feeding of infants and young children. Their purpose is to prevent unnecessary illness due to possible ignorance on the part of the mothers and to instruct them in all branches of hygiene both of the child and of the home. As is to be expected, however, the majority of attendances are made by infants under one year of age, and the number of attendances of children aged one to five years is comparatively small. The figures for 1932 were respectively 26,733 attendances of children under one year of age and 2,866 attendances of children between the ages of one and five years. This is a rather serious gap in the service. Though these older children are visited periodically by the health visitors and a small proportion of them are attending nursery classes, they do not receive that regular medical supervision which is given to children under one year old. Even when they do attend the ordinary child welfare clinics, their claims are apt to be overshadowed by the presence of younger brothers or sisters. I would suggest, therefore, that the provision of special toddlers' clinics, where the health and welfare of these older children could be supervised, would be of great benefit. It is during these years frequently that the seeds of ill-health are sown and that major defects commence in small beginnings, and, if these evils are to be avoided, constant supervision is necessary.

A further expansion of these services that is required is the provision of a maternity and child welfare centre and ante-natal clinic for the Parr district. Many mothers find considerable difficulty, especially during the later weeks of pregnancy, in travelling from the outer boundaries of this district to the Town Hall Centre, and consequently fail to attend as frequently as is desirable. This means that they are losing the benefits of regular supervision at the most important period of their pregnancy.

At the ante-natal clinics specialised examination is provided and advice and instruction given to the mothers. The attendances at the clinics during 1932 again reveal a satisfactory increase, showing appreciation by the expectant mothers of the benefits obtained from regular medical supervision during pregnancy. The services of the Council's Consultant Gynaecologist are available for cases requiring any specialist attention, and at the clinics cases are advised when hospital treatment for the confinement is desirable and bookings are made for the Council's Maternity and Child Welfare Hospital. The months of pregnancy when the patients first attended during 1932 are given below as percentages of the total number of cases attending.

2nd month	4.6%
3rd ,,	6.5%
4th ,,	10.3%
5th ,,	19.2%
6th ,,	17.7%
7th ,,	19.7%
8th ,,	13.3%
9th ,,	8.7%

The number of attendances at the various clinics is shown in Table 28.

TABLE 28.

Attendances at Maternity and Child Welfare and Ante-natal Clinics, 1928—1932.

	1928	1929	1930	1931	1932
Maternity & Child Welfare Centres.					
1. No. of Expectant Mothers attending :					
(*a*) First Visits	327	311	266	171	165
(*b*) Subsequent visits	549	607	438	310	234
2. No. of Mothers attending : ...					
(*a*) First Visits	2284	2221	1766	1699	1796
(*b*) Subsequent Visits ...	7332	7927	8466	7903	8558
3. No of Children attending :					
(*a*) First Visits	2662	1958	2038	2019	2016
(*b*) Subsequent Visits	8067	8329	8811	8315	9082
4. No. of Attendances of :					
(*a*) Expectant Mothers ...	1669	1732	1165	886	773
(*b*) Mothers	27368	26437	26116	26376	28654
(*c*) Children	28708	27522	27057	27149	29554
Total No. of Attendances	57745	55691	54338	54411	59026
Ante=Natal Clinics.					
No. of Expectant Mothers attending	646	1084	1119	1078	990
No. of Attendances	1815	3653	3975	3959	4274

GYNAECOLOGICAL CLINIC.—This Clinic was opened in October, 1931 to provide for the supervision of the post-natal mother and for dealing with defects or disabilities occasioned by previous pregnancies or parturition, thereby ensuring the better health of the mother in future pregnancies and probably throughout the rest of her life. The clinic is held once weekly at the Town Hall Centre and during the year 117 mothers made 374 attendances. Approximately 20% of these patients were referred to the clinic by their own doctors.

44 cases of displacements of the uterus were dealt with, of which 5 were referred to hospital for operative treatment and the remainder were treated at the clinic. 50 cases of post-natal debility and anaemia, 2 patients with mastitis, and 5 patients with menopausal symptoms also attended for advice and treatment. 4 ante-natal patients and 2 cases suffering from gonorrhoea also attended and were transferred to their respective ante-natal and venereal diseases clinics.

The results seen of the treatment of minor displacements of the uterus have been very striking, not only in their immediate effects on the general health and comfort of the mother, but in their beneficial effects on later pregnancies.

In addition to the above, 6 patients were also referred by their own doctors for instruction in birth control methods. 3 of these patients suffered from chronic nephritis and 3 from chronic endocarditis, and in all the cases further pregnancies would have been definitely detrimental to the welfare of the mother.

SUNLIGHT CLINIC.—Two sessions are held weekly at the Artificial Sunlight Clinic and, during 1932, 182 children made 3,357 attendances for treatment. Careful examination of all cases is made before irradiation is commenced and the effect of treatment on the child's condition is carefully watched. The cases are referred to the clinic mainly by the medical officers at the child welfare centres. The patients treated have included marasmic and rachitic children, cases of malnutrition and anaemia, and those not making satisfactory progress either as a result of definite illness or, as sometimes happens, for no apparent reason.

The rachitic children irradiated varied from cases with a typical pre-rachitic syndrome to those which showed actual non-surgical evidence of the disease. Cases of deformity requiring

surgical interference are not dealt with at this clinic. The course of artificial sunlight taken in conjunction with the correction of errors in diet and the home management of the child has proved to be very beneficial.

82 children suffering from rickets were treated during 1932. Of these, 53 were markedly improved, 15 ceased to attend, 10 were referred to hospital for more specialised treatment, in 2 cases there was no appreciable improvement during the year, and 2 children died during the course from causes unconnected with the condition.

12 babies in a marasmic state were brought for treatment, 5 of whom were discharged as cured, 2 markedly improved in their general condition, 2 were transferred to hospital, 2 ceased to attend, and 1 case did not respond to treatment.

Apart from rickets, the largest number of children attending were suffering from anaemia, debility and malnutrition. There were 63 such children, of whom 18 were discharged cured, 22 were much improved in health, 10 showed no response to treatment, 3 were referred to hospital for further treatment, while 10 failed to attend regularly enough or long enough to benefit by the course.

2 children with bronchitis were treated and showed rapid signs of improvement with subsequent recovery.

In 16 cases irradiated because of slow and unsatisfactory progress without definite cause, the response at first was very slow but all of them improved considerably after a month's treatment.

As a whole the results obtained from the Artificial Sunlight Clinic can be considered very satisfactory. It must, however, be remembered that irradiation with artificial sunlight is not a cure for

definite organic disease, though it is of the greatest assistance in cases where there is loss of tone. Further, even in such cases it must be remembered that it is only part of the treatment as attention to nutrition and general hygiene must always be of the greatest importance.

HOSPITAL ACCOMMODATION.—The Council's arrangements for the hospital accommodation of maternity cases are now confined to the Council's Maternity and Child Welfare Hospital Cowley Hill, which was opened in May, 1931. The new hospital has 15 maternity beds and a children's ward with 22 beds for the treatment of children suffering from rickets and nutritional diseases. The assistant medical officer in charge of the Council's scheme for maternity and child welfare is resident at this hospital and carries out all the medical work in connection therewith. The services of the consultant obstetrician are also available if required. The cost of maintenance of patients in the hospital is recovered in accordance with a scale of income drawn up by the Council, and during the year ended the 31st March, 1933 £356/8/3 was charged to patients or their relatives.

On the maternity side 348 cases were admitted during the year, which, with 8 cases remaining in the hospital from the previous year, brought the total number of cases dealt with during the year to 356. The majority of the cases are admitted by the Corporation ambulance on the commencement of labour but, as and when required, special cases are admitted during the latter weeks of pregnancy. These include such cases as patients suffering from albuminuria and heart cases. During the year 307 cases were delivered at the hospital, of which 279 deliveries were carried out by the nursing staff and 28

by the doctor. There were 3 maternal deaths in which the causes of death were :—

(1)—Post-partum haemorrhage, retained placenta, and chronic nephritis.

(2)—Post-partum haemorrhage and retained placenta.

(3)—Placenta praevia.

Infant deaths numbered 23 of which 16 were still-born. The causes of the other 7 infant deaths were as follows :—

Prematurity due to		
(a) Albuminuria	2	
(b) Placenta praevia.....	1	
	—	3
Intestinal obstruction due to congenital atresia of intestine		1
Difficult forceps delivery		1
Prolonged labour due to uterine inertia		1
Asphyxia pallida due to abnormally short cord		1
		—
		7
		—

On the children's side of the hospital 89 cases were dealt with during the year, including 19 cases which were remaining in hospital on the 1st January. Table 29 gives a summary of the children dealt with during the year, Table 30 shows the reasons for admission, and Table 31 shows the causes of the deaths that occurred.

TABLE 29.

General summary of the cases admitted to the Children's Wards of the St. Helens Maternity and Child Welfare Hospital during 1932.

Hospital n 1st n., 1932	Number of Admissions during year	Average duration of stay in days	Number of Cases Discharged				Deaths	Number of Cases of Infectious Diseases			
			No improvement.	Improved.	In Good health.	Discharged on account of illness.		Measles.	Whooping Cough.	Epidemic Diarrhoea	Scarlet Fever.
19	70										
89		81	8	20	34	*3	9	—	—	—	—

* 1 transferred to Heswall.
1 ,, ,, Peasley Cross Sanatorium.
1 ,, ,, Liverpool.

Table 30.

Table showing the reasons for admission of Children to the St. Helens Maternity and Child Welfare Hospital during 1932.

Reason of Admission	Number
Rickets	25
Bronchitis	8
Marasmus	13
Debility	13
Pyelitis	2
Haemephilia	1
Tubercular peritonitis	2
Gastro enteritis	1
Phlyctenular conjunctivitis	1
Scoliosis spine - post infantile paralysis	1
Cleft palate and marasmus	1
Congenital heart disease and mongolism	1
Pylorix stenosis	1
	70

Table 31.

Table showing the deaths of children at the St. Helens Maternity and Child Welfare Hospital during 1932, with dates and causes, periods of residence, and ages.

Date.	Cause of Death.	Days in Hospital	Age.
1932.			
Jan. 4.	Marasmus	5	3 months
,, 12.	Marasmus and congenital syphilis	41	3 ,,
May 10.	,, ,, ,,	54	5½ ,,
July 8.	Tabes mesenterica	8	20 ,,
Sept. 3.	,, ,,	33	21 ,,
Oct. 14.	Marasmus	53	3 ,,
,, 22.	Gastro enteritis	3	5 weeks
Dec. 19.	Acute rickets and diarrhoea and vomiting	7	11 months
,, 31.	Congenital heart disease and mongolism	51	8 ,,

MILK FOR MOTHERS AND INFANTS.—At all the clinics and centres full cream dried milk and chocolate milk are on sale at cost price or are available at less than cost price for necessitous cases. Cases in receipt of relief from the Public Assistance Committee are, when so requiring it, recommended to that Committee for the supply of extra nourishment. There is no doubt that this service has reduced considerably the evils of under-nourishment which might otherwise result during the present prevalence of unemployment.

During the year approximately 400 cwt. of milk were disposed of, and, of this, 53½ lbs. were issued free and 44,447 lbs. at less than cost price.

Cod Liver Oil Emulsion, Malt and Oil, and Virol are also provided at the centres at cost price or free in suitable cases.

STERILE MATERNITY OUTFITS.—It is to be regretted that the scheme for the provision of sterile maternity outfits instituted in 1931 for the benefit of mothers confined in their own homes has not been taken advantage of. These outfits are issued at the low cost of 3/- which can be paid in small instalments prior to the confinements. I am certain that there is definite need for this service in that the use of these outfits would make conditions for the confinement at home nearer to the standard of surgical cleanliness obtainable in hospital and thus reduce the risk of puerperal infection.

MATERNITY BAGS.—Maternity Bags containing sheets, nightgowns, baby clothing, etc., are issued on loan to cases in which the mothers have been unable to make the necessary provision. Bags have been lent out in 19 cases during the year.

MINOR AILMENTS AND DENTAL DEFECTS.—During the year, 17 children received treatment for minor ailments, and 309 mothers and 179 children received dental treatment at the school clinic. Mothers in need of dentures are supplied with these at cost price.

CRIPPLED CHILDREN.—A complete record of the work of the Orthopaedic Clinic is given in Table 22 in the Tuberculosis section of the Report.

From that Table it will be seen that under the Maternity and Child Welfare service 178 crippled children under 5 years of age were dealt with. This involved 233 attendances to see the orthopaedic surgeon, and 1,293 attendances for intermediate treat-

ment. 6 cases were admitted to hospital for operation or other surgical treatment. The cases dealt with comprised the following defects :—

Infantile paralysis	22
Other forms of paralysis	19
Rickets	70
Congenital deformities	20
Traumatism	8
Acquired foot deformities	24
Arthritis, hip	3
Miscellaneous	12

EXPANSION OF MATERNITY AND CHILD WELFARE SERVICES.—In addition to the expansion of the services already mentioned, namely, the provision of Special Clinics for Toddlers and the provision of a Child Welfare and Ante-natal Centre for the Parr district, the most urgent provision now required is a Hostel for Children aged one to five years. Many mothers find themselves unable to go to hospital for confinement owing to inability to make suitable arrangements for the care of the younger children during their absence from home. Preventing as it does many cases who should be in hospital from going there, this is a serious problem in the fight against maternal mortality. The provision of a home or hostel where children under 5 years of age could be accommodated would overcome this difficulty. It would also be extremely useful for the accommodation of these children in cases where the mother is confined at home, thus relieving her of anxiety regarding their care. Further, there are always some young children—mainly orphans or abandoned children—for whom, at present, the only accommodation available is in nurseries in Poor Law institutions. To make these children start life as " paupers " seems very unfair, and it would be

much better if the necessary nurseries were not under the Poor Law and the children as they grow older were drafted to other schools or homes.

For these purposes I would suggest a home or hostel with accommodation for about 30 children. The cost of maintenance would not be great as it would be run as a home rather than a hospital and very few trained staff would be required. In its benefits to the community it would more than justify itself.

IX.—WELFARE OF THE BLIND.

There were 196 Blind Persons on the Blind Register for St. Helens on the 1st April, 1932, and this number decreased by 1 to 195 during the year. Blindness amongst children appears to be diminishing, no child under 5 years of age being on the register. The following is an analysis of the cases on the register at the 31st March, 1933.

Age distribution :—

Age	0—5 years	....	—
	5—16 ,,	....	13
	16—21 ,,	....	11
	21—50 ,,	....	54
	50—70 ,,	....	60
	70— ,,	....	57
	Total	....	195

Educational and occupational distribution :—

Infant		—
Education	At School	13
	Not at school (mentally defective)	1
Employment	Employed (Workshops or Home Workers Scheme)	27
	Employed (Working on own account)	9
	Under Training	12
	Not training but trainable	1
	Unemployable	132

All provision for the care and welfare of the local blind—with the exception of that of blind children under two years of age, and the education of children of school age and vocational training—is undertaken on behalf of the Corporation by the St. Helens and District Society for the Welfare of the Blind.

The treatment of persons suffering from disease of, or injury to the eye, and the provision of suitable glasses as a preventative of blindness is undertaken by the Council under Section 66 of the Public Health Act, 1925.

X.—LOCAL GOVERNMENT ACT, 1929.

The administrative arrangements under the Local Government Act, 1929, were described in my Report for 1930 and remain unchanged.

Table 32 shows the number of persons in receipt of relief on medical grounds on the 1st January, 1933.

Table 32.

Persons in receipt of Institutional Poor Relief on account of sickness, or bodily or mental infirmity, and rate aided persons in mental hospitals on the night of the 1st January, 1933.

Establishments in which persons were relieved.	Men	Women	Children between 3 and 16 years of age	Infants under 3 years of age	Total
(A) *In Poor Law Establishments* :—					
Whiston Infirmary :					
(*a*) Sick wards	63	32	10	8	113
(*b*) Persons suffering from mental infirmity and certified under the Lunacy Acts or the Mental Deficiency Acts	54	55	—	—	109
Swinton Homes for Mental cases	—	—	2	—	2
(B). *In Establishments not administered under the Poor Law Acts* :—					
(*a*) Establishments for persons suffering from mental infirmity, excluding persons maintained under the Lunacy and Mental Treatment Acts, 1890 to 1930, in Mental Hospitals :—					
Royal Albert Institution, ...	3	—	—	—	3
(*b*) Other Establishments for the Sick—					
Maghull Home for Epileptics	3	6	—	—	9
St. John's Institution for Deaf and Dumb, Boston Spa	—	1	—	—	1
David Lewis Epileptic Colony, Manchester	1	—	—	—	1
Liverpool Workshop for Cripples	2	1	—	—	3
Chalfont Epileptic Colony, Bucks.	—	1	—	—	1
(C). *In Mental Hospitals administered under the Lunacy and Mental Treatment Acts* :—					
Rate aided persons	110	119	—	—	229
TOTALS	236	215	12	8	471

XI.—LIST OF ADOPTIVE AND LOCAL ACTS, BYELAWS, AND LOCAL REGULATIONS AND ORDERS relating to the public health, in force in the district.

ADOPTIVE ACTS.

The Infectious Disease (Notification) Act, 1889, applied to :

(1) Ophthalmia Neonatorum, by Order of the Local Government Board, which came into force on the 7th April, 1910.

(2) Acute Poliomyelitis and Cerebro Spinal Fever, by Order of the Local Government Board, which came into force on the 19th February, 1912.

The Infectious Disease (Prevention) Act, 1890. Adopted 7th January, 1891.

The Public Health Acts Amendment Act, 1890. Parts II and III adopted 1st April, 1891. Part IV adopted 1st July, 1923. Part V adopted 24th October, 1894.

Public Health Acts Amendment Act, 1907, Sections 78, 79, 80, 81, 85, 88, 89 and 90, put in force 1st January, 1909. Sections 19, 25, 26, 27, 29, 32, 33, 34, 35, 36, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 66, 67, 68, 93, and 95, and Part V, put in force 23rd August, 1909.

The Public Health Act, 1925, Part II, Sections 13, 14, 15, 16, 20, 23, 25, 26, 27, 28, 30, 31, 32, and 35 ; Parts III, IV, and V, adopted 7th December, 1927, put in force on 1st February, 1928.

LOCAL ACTS with Sanitary Clauses.

The St. Helens Improvement Act, 1869.
The St. Helens Corporation Act, 1893.

The St. Helens Corporation Act, 1898.
The St. Helens Corporation Act, 1911.
The St. Helens Corporation Act, 1921.

ADAPTATION OF LOCAL ACTS.

The Borough of St. Helens (Adaptation of Local Acts) Order, 1930, made by the Minister of Health, for bringing certain provisions of the local Acts into conformity with the provisions of the Public Health Act, 1925.

The Ministry of Health Provisional Orders Confirmation (St. Helens and York) Act, 1931 ; confirming the St. Helens Order, 1931 as to Tuberculosis.

The Ministry of Health Provisional Orders Confirmation (No. 1) Act, 1928, repealing and altering certain sections of the St. Helens Improvement Act, 1869, and the St. Helens Corporation Acts, 1893, 1898, 1911, and 1921 with reference to New Streets and Buildings.

BYELAWS.

Byelaws as to Nuisances, confirmed by the Home Office, 11th May, 1870.

Byelaws with respect to Nuisances made by the Council on the 1st October, 1930.

Byelaws as to Slaughterhouses, made by the Council on the 5th February, 1930.

Byelaws with respect to New Streets and Buildings in the Borough of St. Helens, made by the Council on the 5th October, 1927.

Byelaws with respect to the Drainage of Existing Buildings in the Borough of St. Helens made by the Council on 7th December, 1927.

Byelaws with respect to Tents, Vans, Sheds and similar Structures used for human habitation made by the Council on the 28th July, 1926.

Byelaws with respect to Common Lodging Houses, made by the Council on the 2nd May, 1894.

Byelaws with respect to Houses let in Lodgings, made by the Council on the 2nd May, 1894.

Byelaws with respect to Female Domestic Servants' Registries, made by the Council on the 1st December, 1909.

Byelaws with respect to the Supply of Water, made by the Council on the 6th June, 1900.

Byelaws with respect to Cisterns, Waterclosets and Urinals, made by the Council on the 1st February, 1922.

Byelaws as to Spitting, made on the 2nd August, 1911.

REGULATIONS.

Regulations as to Public Abattoir and Cold Air Stores, made by the Council on the 2nd May, 1906.

The Borough of St. Helens (Notification of Measles, German Measles and Whooping Cough) Regulations, 1915, made by the Minister of Health on the 22nd June, 1915.

ORDERS—SHOP ACTS.

General Weekly Half-Holiday Order, made on the 7th August 1912.

Weekly Half-Holiday Extension Order (Butchers and Chemists) made on the 4th December, 1912.

Closing Order (Motor, Cycle and Aircraft dealers) confirmed by the Home Secretary on the 30th January, 1913.

Closing Order (Tailors, etc. Shops) confirmed by the Home Secretary on the 10th December, 1915.

XII.—INSPECTION AND SUPERVISION OF FOOD.

MEAT AND OTHER FOOD.—There is a municipal abattoir with cold stores attached. Slaughtermen are licensed by the Corporation, and all animals killed are inspected by a qualified meat inspector.

There is now only one private slaughterhouse in the Borough. This slaughterhouse is licensed for the slaughter of pigs only and the licence comes up for review yearly. 295 visits of inspection were made during the year and no infringements of the Byelaws with respect to Slaughterhouses or of the Public Health (Meat) Regulations, 1924, were found.

Table 33 shows the number of animals slaughtered and the approximate weight in pounds of meat found diseased.

Table 33.

Number of Animals slaughtered and amount of diseased meat condemned during the year, 1932.

	Abattoir.				Private Slaughterhouses.			
	Number of Animals Slaughtered.	No. of Animals found diseased		Weight in lbs. of Meat Condemned	Number of Animals Slaughtered.	No. of Animals found diseased		Weight in lbs. of Meat Condemned
		Tuberculosis	Other diseases.			Tuberculosis	Other diseases.	
Beasts	4074	748	1105	74252	—	—	—	—
Calves	208	—	4	214	—	—	—	—
Sheep	1535	—	—	153	—	—	—	—
Pigs	5462	200	200	7882	2434	153	74	1925

The re-arrangement of the Sanitary Staff as outlined in last year's Report, whereby the inspection and supervision of all food is now undertaken by one specialist Food Inspector, has enabled increased attention to be paid to this branch of work during the year and has led to improvement in the standard of cleanliness and methods of manufacture and handling.

In previous Reports I have suggested that existing legislation was inadequate to ensure the proper protection of food supplies and advantage was taken during the promotion of the St. Helens Corporation Bill, 1933, to seek further powers in regard to this important aspect of public health. These powers include, inter alia :—

(1) Registration of premises used for the preparation of potted and preserved foods.

(2) Power to make byelaws for securing cleanly and sanitary conditions in the transport or exposure of food for sale.

(3) Registration of storage accommodation used by hawkers of meat.

(4) Registration of ice cream manufacturers and premises and power to refuse registration or remove from register.

During 1932, 3,376 visits were made to shops, stalls and vehicles and places where food is prepared or stored, as compared with 2,825 during 1931. The following is a brief summary of the work covered by these visits. Further details are given in the appropriate sections of the Report :—

Premises.	Visits	No. of offences against Acts, Orders &c.	No. of nuisances or defects found	No. of nuisances or defects remedied after service of notice
Private Slaughter-houses	295	—	—	—
Fried Fish shops	113	—	—	—
Fishmongers and Greengrocers	642	41	4	4
Butchers shops	1278	49	7	2
Ice Cream shops	226	—	20	11
Bakehouses	292	—	21	21
Tripe Boilers	87	—	—	—
Food Preparing and Storing Places	443	—	1	1

The following are the quantities of various classes of food-stuffs which were condemned during the year owing to being diseased or unsound :—

Meat	84,426 lbs.
Fish	2,912 ,,
Poultry, Game and Rabbits	89 ,,
Fruit	9 ,,
Danish Maws	168 ,,

Sale of Food Order, 1921.—*Labelling of Imported Meat.*—Despite the number of prosecutions taken by the Department in past years, offences against this Order still continue to be found.

In five instances further warnings were given and in five instances legal proceedings were instituted.

The results of the prosecutions were as follows :—

(1)—Fined £2/0/0.

(2)—Fined £2/0/0 and costs.

(3)—Fined £1/0/0 and costs.

(4)—Dismissed on payment of costs.

(5)—Dismissed on payment of costs.

Public Health (Meat) Regulations, 1924.—Thirteen offences against the above Regulations were found during the year. The offences consisted of :—

	No. of Offences
1. Failure to protect meat from contamination by street dust	8
2. Premises not kept in a cleanly condition	2
3. Unsuitable premises used for the storage of meat	2
4. Unsuitable receptacle for the storage of trimmings and refuse	1

These offences were dealt with by verbal and written warnings.

Agricultural Produce (Grading and Marking) Act, 1928.—Practically no use is made in St. Helens of the special trade designations allowed by the Regulations made under this Act nor are there any premises registered for the cold or the chemical storage of eggs.

Merchandise Marks Act, 1926.—The Orders which have so far been made under the Merchandise Marks Act, 1926, in regard to foodstuffs are :—

Order.	Relating to
The Merchandise Marks (Imported Goods) No. 3 Order, 1928	Honey. Fresh Apples.
The Merchandise Marks (Imported Goods) No. 5 Order, 1928	Currants, Sultanas, Raisins. Eggs in Shell. Dried Eggs. Oat Products.
The Merchandise Marks (Imported Goods) No. 4 Order, 1929	Raw Tomatoes.
The Merchandise Marks (Imported Goods) No. 5 Order, 1930	Malt products, namely Malt Extract, Malt Flour, Malt Extract and Cod Liver Oil and Malt Extract blended with any other product so that Malt Extract comprises more than 50 per cent by volume of the whole.
The Merchandise Marks (Imported Goods) No. 8 Order, 1931	Imported frozen or chilled salmon or imported frozen or chilled sea trout or any imported salmon or sea trout which has been subjected to any process of freezing or chilling prior to importation.
The Merchandise Marks (Imported Goods) No. 1 Order, 1932	Butter.

These Orders require that any classes of foodstuffs to which they relate shall on importation, on exposure for sale, and when sold in quantities exceeding 14 lbs. in weight, be clearly marked with an indication of origin.

Owing to the number of prosecutions in previous years, these Orders are now being more generally complied with, and in only one instance was it necessary to institute legal proceedings.

MILK SUPPLY.—At the close of the year there were registered under the Milk and Dairies (Amendment) Act, 1922, and the Milk and Dairies Order, 1926 :—

8 persons as cowkeepers and wholesale and retail purveyors of milk ;

2 persons as cowkeepers and wholesale purveyors of milk ;

8 persons as cowkeepers and retail purveyors of milk ;

347 persons as purveyors of milk ; and

89 premises as cowsheds or dairies.

A total of 1,133 inspections was paid by the sanitary inspectors to the cowsheds, dairies and milkshops during the year. Approximately 200 cows are kept for dairy purposes within the borough, and these were regularly inspected by the veterinary inspector.

In continuance of the campaign towards a purer and better milk supply, special attention was given during 1932 to the education of cowkeepers and dairymen in the proper methods of milk production and distribution and of the public in the benefits and dangers of milk as a food.

The first Clean Milk Competition held in 1931 was limited to milk producers in the borough, but as much of the town's milk supply is produced outside the borough, and the object aimed at is to bring all milk consumed in the borough up to a high standard of purity and cleanliness, the Competition during 1932 was thrown open to all milk producers in the neighbouring areas who retail milk in the borough.

17 farmers entered for the Competition, 10 of whom were in the borough and 7 in the Lancashire County Area.

A very much higher standard was attained by the Competitors in 1932 than in the previous Competition. Of 102 surprise samples taken, 74 reached Certified Milk standard in bacterial count. This result is an extremely satisfactory one and one which compares very favourably with those obtained in Clean Milk Competitions in other parts of the Country. The results obtained would have been even better had milk producers in the borough been able to cool the milk during the summer months to the requisite low temperature. This was, however, not possible in a number of instances owing to the comparatively high temperature of the water supplied from the Corporation mains. It is pleasing to note that Competitors are becoming more alive to the value of steam as a sterilising agent, though there is still considerable room for improvement in this respect. Too many appear to think that steam sterilisation can only be effected with the aid of elaborate apparatus, whereas very efficient steam sterilisation can be obtained under very simple arrangements and at very low cost. At a number of farms covered milk pails are being used, though here again it is to be regretted that their use, which is an important factor in the prevention of contamination, has not become more general.

Success or otherwise in the production of clean milk, however, will always be dependent on the personal factor. No matter how good the appliances are, want of cleanliness or carelessness on the part of the milker or others handling the milk will always mean

contaminated milk. In the Competition during 1932 special attention was given to this point, and it was very satisfactory to note the great improvements in methods as compared with the previous year.

Arrangements were also made during 1932 for the Lancashire County Council Agricultural Staff to carry out advisory work in St. Helens in connection with milk production. These services include periodical visits to all milk producers in the borough, and the giving of advice not only in clean milk production but also in the feeding and general care of the cows.

A course of lectures for milk producers and distributors was also given at the Municipal Technical School. The course, which consisted of 10 lectures and 2 practical demonstrations, commenced in January and 83 students enrolled. Owing to the success of this course a more advanced course was commenced in October. This consisted of 21 lectures, 11 of which were for both producers and distributors, 5 were of special interest to producers, and 5 to distributors. The number of students enrolling for this course was 43. There is no doubt that these courses have had considerable effect in improving the milk supply. By learning why certain things should be done and certain other things should not be done, a far more intelligent and efficient co-operation is obtained and those in the business realise more readily that clean milk is not a fad.

In addition to these activities, a very successful Special Milk Exhibition was held in conjunction with the Health Exhibition at the Town Hall from March 7th to 12th. This Exhibition was designed mainly to impress on the general public the importance of milk as a food. The Exhibition was arranged by the St. Helens Milk Producers and Distributors acting in co-operation with the Health Committee. During the Exhibition demonstrations in butter making, ice cream making and soft cheese making were given, together with cookery demonstrations illustrating the various uses of milk.

That there has been a material improvement during the past few years in the quality of the St. Helens milk supply, so far as it is obtained locally or in the neighbouring areas is, I think, beyond question. This improvement has resulted mainly from educational work. There is, however, still a small number of producers who make no serious effort and until there is a legal minimum standard of cleanliness and bacterial count the quality of the supply cannot be completely satisfactory. Further, unless other areas from which St. Helens draws its milk pay as much attention to the question as is done in St. Helens, the enforcing of a legal standard would appear to be the only means by which the supply could be efficiently safeguarded.

The following licences were granted during the year under the Milk (Special Designations) Order, 1923 :—

Producers Licence to sell milk as " Grade A."	3
Dealers Licence to sell milk as " Grade A."	1
Licence to sell milk as " Certified "	1
Pasteurisers Licence to sell milk as " Pasteurised "	1
Supplementary Licence to sell milk as " Pasteurised "	1

Milk and Dairies Order, 1926.—As in the past year, comparatively few offences against the Milk and Dairies Order, 1926, were found during 1932. It was, however, necessary to institute legal proceedings in four instances with the following results :—

Offence.	Fine.
1.—Delivering milk in bottles which had not been filled and closed on registered premises	£1/0/0 and costs.
2.— do.	£1/0/0 and costs.
3.—Filthy condition of vehicle used for the conveyance of milk.	£1/0/0 and costs.
4.—Conveying and distributing milk without using all practicable precautions for preventing the milk from being contaminated.	Dismissed on payment of costs.

In the first two offences, milk vendors were found to be filling unwashed bottles with milk in the street. This practice is an extremely dangerous one and one which is likely to spread infectious disease, and I am of opinion that severer penalties should be inflicted in the case of such offences.

Bacteriological Examination of Milk.—110 samples of milk were sent during the year to the University Laboratory, Liverpool, for examination for the presence of tubercle bacilli and for guinea pig inoculation tests.

The percentage of samples found to contain positive evidence of tubercle bacilli and the number of cows found to be giving infected milk for the years 1930, 1931 and 1932 are as follows :—

Year	No. of samples taken	Percentage found positive	No of cows found to be giving the infected milk
1930	95	13.3%	17
1931	92	2.4%	3
1932	110	11.0%	8

Following the lower percentage of infected samples discovered in 1931, the much higher percentage of 1932 is disappointing though it is still lower than for 1930. No specific reason can be given for this. With, however, a larger number of samples taken during 1932 than in previous years the number of cows found to be giving infected milk was only 8 as compared with 17 for 1930. These figures appear to indicate that a gradual elimination of cows yielding infected milk is taking place. It should be remembered that one cow affected with tuberculosis may infect the whole of a consignment of the mixed milk from a number of cows, and this, in part, may explain the apparently unsatisfactory results obtained during the current year.

One of the difficulties of dealing with the question of tuberculous milk is that though only a small proportion of dairy cows affected with tuberculosis yield infected milk, all are potential sources

of infection and may from time to time be the cause of infection of the milk. It is not necessary that the udder of a cow be tubercular for the milk to become infected with tuberculosis. A cow affected with tuberculosis of the lungs may excrete tubercle bacilli with its dung. The flanks and external surface of the udder thus become infected and with inefficient grooming the infection readily passes into the milk.

Another difficulty in dealing with this question is that the composition of herds is constantly changing and there are also frequent changes in producers sending milk into the borough.

For these reasons, therefore, variations in the results of bacteriological examinations will occur from year to year. The only practicable methods of combating this danger is by frequent and careful veterinary examination of all dairy cattle in conjunction with the frequent and systematic bacteriological examination of samples of the milk.

The following table shows the results of the action taken in respect of the twelve samples showing positive evidence during 1932 :—

No. of sample	Where taken	Where produced	No. of cows slaughtered
95	Dairy premises	Cheshire County Area	1
113	Dairy premises	Lancashire County Area	1
121	Dairy farm	St. Helens	Not traced
135	Milk float	Lancashire County Area	Not traced
159	Milk float	Lancashire County Area	1
168	Milk float	Lancashire County Area	Not traced
177	Dairy farm	St. Helens	1
183	Dairy premises	Lancashire County Area	1
191	Dairy premises	Cheshire County Area	Not traced
195	Dairy farm	St. Helens	1
204	Milk float	Lancashire County Area	1
207	Dairy Premises	Cheshire County Area	1

FOOD AND DRUGS (ADULTERATION) ACT, 1928, etc.—Food and Drugs (Adulteration) Act, 1928.—During the year, 214 formal samples and 173 informal samples were taken for analysis.

The natures of the samples taken, with the results of examination by the Public Analyst, are shown in Table 34.

Table 34.

Number of samples taken under the Food and Drugs (Adulteration) Act, 1928, during 1932, and results of analysis by the Public Analyst.

ARTICLE	Number of Samples Taken		Number Genuine		Number Adulterated	
	Formal	Informal	Formal	Informal	Formal	Informal
Milk	193	96	181	88	12	8
Fresh Cream	1	3	—	2	1	1
Butter	2	9	2	9	—	—
Margarine	1	4	1	4	—	—
Lard	—	8	—	8	—	—
Cheese	—	2	—	2	—	—
Coffee	—	2	—	2	—	—
Cocoa	—	2	—	2	—	—
Sweets	—	6	—	6	—	—
Rum	1	1	1	1	—	—
Ground Cinnamon	1	1	1	1	—	—
Prescriptions	3	—	3	—	—	—
Malt and Butter Fingers	1	1	—	—	1	1
Strawberry Jam	1	—	1	—	—	—
Beef Sausage	2	7	2	7	—	—
Brawn	1	—	1	—	—	—
Cheshire Cheese	—	3	—	3	—	—
Black Currant Jelly	—	1	—	1	—	—
Baking Powder	—	1	—	1	—	—
Lime Juice Cordial	—	2	—	2	—	—
White Pepper	—	3	—	3	—	—
Self-Raising Flour	1	2	1	2	—	—
Ham and Tongue	—	1	—	1	—	—
Lemonade Powder	2	—	2	—	—	—
Egg and Milk Toffee	1	—	1	—	—	—
Pure Golden Syrup	—	1	—	1	—	—
Bi-Carbonate of Soda	—	2	—	2	—	—
Cream of Tartar	—	2	—	2	—	—
Epsom Salts	—	2	—	2	—	—
Pork Sausage	—	1	—	1	—	—
Raspberry & Apple Jam	—	1	—	—	—	1
Malt Vinegar	—	2	—	2	—	—
Sultanas	—	3	—	3	—	—
Tripe	—	1	—	1	—	—
Beef Paste	—	1	—	1	—	—
Salmon Cream	—	1	—	1	—	—
Beef Suet	—	1	—	1	—	—
Whisky	3	—	3	—	—	—
Total	214	173	200	162	14	11

The appended statement shows the action taken in the case of adulterated samples taken formally :—

(a) Legal proceedings instituted under the Food and Drugs (Adulteration) Act, 1928.

Sample No.	Article.	Adulteration and Result of Proceedings.
397	New Milk	13% deficient in milk fat. Fined £5/0/0 and £3/11/0 costs. In this case the milk vendor appealed against the conviction. The appeal was heard at the Liverpool Quarter Sessions on October 19th, 1932, but was dismissed with costs against the appellant.
470	New Milk	8% deficient in milk fat. Dismissed on payment of £1/7/0 costs.
471	New Milk	7% deficient in milk fat. Conviction recorded with costs of £4/7/0. In this case the third portion of the sample was analysed by the Government Chemist. Dismissed on payment of costs.
205	Bread and Butter.	18% Margarine Dismissed on payment of costs

In addition to the above, legal proceedings were instituted against a shop-keeper for refusal to sell to the sampling officer a sample of beef paste. In this instance a fine of £1/0/0 and costs was inflicted.

(b) No legal proceedings instituted, but in all cases the seller was warned by the Committee.

Sample No.	Article.	Adulteration.
M.D.A. 41	New Milk	2% deficient in milk fat.
M.D.A. 42	New Milk.	2% deficient in milk fat.
323	New Milk.	4% deficient in milk fat.
401	Sweets (Malt and Butter Fingers).	Fat consisted of fat other than Butter.
365.	New Milk.	4% deficient in milk fat.
386.	New Milk.	2% deficient in milk fat.
389.	New Milk.	2% deficient in milk fat.
502.	New Milk.	8% deficient in milk fat.
505.	New Milk.	5% deficient in milk fat.
529.	New Milk.	8% deficient in milk fat.
599.	Fresh Cream.	Contained Boron Preservative calculated as Boric Acid 0.24%.

Examination of Milk for Dirt.—Three samples of milk were specially examined for dirt. One sample was found to contain 8 parts by volume of dirt per 100,000 parts of milk. In this instance the vendor was prosecuted under Article 32 of the Milk and Dairies Order, 1926, for failing to prevent the milk from being contaminated by dirt, but the case was dismissed on payment of costs.

The Public Health (Condensed Milk) Regulations, 1923 and 1927.—No infringements of the above Regulations were found during the year.

The Public Health (Dried Milk) Regulations, 1923 and 1927.—No infringements of the above Regulations were found during 1932.

Artificial Cream Act, 1929.—No premises are registered under this Act in St. Helens and no infringements were found during the year.

Ice Cream Premises.—At the end of the year there were 52 persons in St. Helens known to be engaged in the making of ice-cream. Most of these persons are also small shopkeepers and not wholly dependent upon its manufacture or distribution as a means of livelihood.

Stricter supervision of these premises is now being carried out by the Department than formerly and as a result 20 notices were served during the year requiring alterations and repairs to premises used for this purpose in order to bring them up to a reason-

able standard of fitness. In 6 instances the alterations and repairs were carried out satisfactorily and in 12 instances the manufacture of ice-cream was discontinued.

Further powers for controlling this class of premises have been obtained by Sections 133 and 134 of the St. Helens Corporation Act, 1933. These sections require the registration of all persons manufacturing or selling ice cream and all premises used or proposed to be used for such purposes. In addition, power is given to refuse registration or to remove from the register such persons or premises where the Corporation is of opinion that the public health is or is likely to be endangered.

These powers will do much to improve the conditions under which ice-cream is manufactured and sold, but until freedom from contamination and adulteration is safeguarded by means of bacteriological and chemical standards, the powers for controlling this class of foodstuffs cannot be regarded as adequate.

Public Health (Preservatives in Food) Regulations.—One infringement of the Public Health (Preservatives in Food) Regulations was found during the year. The infringement consisted of selling fresh cream containing 0.24% Boric Acid.

In this instance the vendor was warned by the Committee.

Fertilisers and Feeding Stuffs Act, 1926.—9 informal samples of fertilisers and feeding stuffs were taken under the above Act, during 1932, and were all found to be genuine.

Three infringements of the Act in respect of labelling were dealt with by verbal warnings.

Poisons and Pharmacy Act, 1908.—Two licences were renewed during the year under Section 2 (1) of the Poisons and Pharmacy Act, 1908, for the sale of poisonous substances for use exclusively in agriculture and horticulture.

No infringements of this Act were found during the year.

DISEASES OF ANIMALS ACTS.—Tuberculosis Order, 1925.—During the year 5 notifications were received under the Tuberculosis Order, 1925, of cattle within the borough suffering from tuberculosis. Of these, 1 was discovered by the Council's Veterinary Inspector, 2 were notified as suspicious cases by the Chief Sanitary Inspector, 1 was discovered as a result of the routine bacteriological examination of milk in St. Helens, and 1 resulted from our investigation of a report by the Haydock Urban District Council that tubercle bacilli had been found in a sample of milk taken in their area. In four instances slaughter was carried out by the Council and evidence of tuberculosis was found on post-mortem examination. The remaining animal was slaughtered voluntarily by the owner.

The total compensation paid to owners was £17, and the net amount of salvage recovered by the Corporation was £9/18/7. In one instance, in addition to the compensation paid to the owner, the Corporation also paid to him the sum of 19/1d. which was the amount by which the proceeds of the salvage of the carcase exceeded the amount of compensation.

Anthrax.—No case of Anthrax was reported during the year.

Swine Fever.—20 cases of suspected Swine Fever were reported during the year. In no instance was the disease confirmed by the Ministry of Agriculture.

BAKEHOUSES.—There are 83 bakehouses on the Register, one of which is underground. Mechanical power is used in 28 instances.

292 visits of inspection were made during the year and 21 sanitary defects were found and remedied after notice being given, as compared with 451 visits and 64 sanitary defects remedied for the previous year.

XIII.—SANITARY CIRCUMSTANCES OF THE AREA.

WATER.—The water supply is from deep wells and boreholes in new red sandstone at Eccleston Hill, Whiston, Knowsley, Kirby, and Melling, supplemented by a supply from the Liverpool Corporation Rivington Main, and water from coal measures at Collins Green.

The water is of a high degree of purity, though hard. The total hardness is reduced from 22.6 degrees to 10.5 by a softening process before distribution.

RIVERS AND STREAMS.—The position outlined under this heading in previous Reports is substantially unchanged.

CLOSET ACCOMMODATION.—During the year, 14 privy middens and 3 tub and pail closets were converted to the fresh water carriage system. It is estimated that there are still 474 houses with privy middens and 194 houses with tub and pail closets, and there are in addition 73 pail closets and one privy midden at various schools and works.

Many of the closets to be converted are either in areas which are now being dealt with by means of clearance schemes or are attached to individual unfit houses which will shortly be demolished under the Housing Act, 1930. There will, therefore, be a considerable reduction in their number during the coming year.

The conversion of other closets cannot be undertaken at the present time owing to the lack of adequate sewers, but it is hoped that this obstacle will, in some measure, be overcome in the near future.

Table 35 shows the number of conversions completed each year since 1904.

Table 35.

The number of conversions to the water carriage system completed each year since 1904.

Year	Privies	Tub and pail closets	Total
1904	69	67	136
1905	80	64	144
1906	47	19	66
1907	237	125	362
1908	243	24	267
1909	106	38	144
1910	179	33	212
1911	270	129	399
1912	301	691	992
1913	460	646	1,106
1914	691	976	1,667
1915	300	380	680
1916	57	112	169
1917	45	103	148
1918	18	21	39
1919	148	142	290
1920	284	369	653
1921	75	198	273
1922	45	350	395
1923	132	367	499
1924	160	685	845
1925	82	278	360
1926	39	238	277
1927	69	264	333
1928	219	229	448
1929	121	103	224
1930	29	95	124
1931	37	118	155
1932	14	3	17

SCAVENGING.—The removal and disposal of house refuse is carried out by the Borough Engineer's Department. There are no refuse disposal works for dealing with refuse, and the majority is tipped at Parr Depot.

During 1932, 640 ashpits were abolished and 723 galvanised metal dustbins were provided as compared with 492 and 908 respectively for the previous year.

As pointed out in my Annual Report last year fixed ashpits cannot be considered to be a satisfactory means of storing house refuse. Further, the adoption of a standard dust receptacle throughout the town will facilitate the collection of house refuse.

For these reasons, therefore, I would urge that the powers conferred on the Corporation by Section 135 of the St. Helens Corporation Act, 1933, to require the substitution of fixed ashpits by portable galvanised metal dustbins be enforced in the immediate future.

SANITARY INSPECTION OF THE AREA.—The total number of visits paid by sanitary inspectors during the year was 35,779. The nature of these inspections is shown in Table 36, and Table 37 contains a list of the notices served and the results of such notices.

Table 36.

Number and nature of inspections during 1932.

Complaints of Nuisances.

Number of Complaints Investigated :—	
1. Housing Defects	778
2. Choked and Defective Drains	505
3. Emission of Smoke	9
4. Accumulations of Offensive Matter	38
5. Miscellaneous	138

Inspections re Sanitation and Food Supply.

Dwelling Houses inspected	3,739
Common Lodging Houses	280
Houses-let-in-lodgings	202
Common yards, back-roads and passages	984
Horse-manure middensteads	107
Fried Fish Shops	113
Fishmongers and Greengrocers	642
Butcher's Shops	1,278
Ice Cream Shops	226
Factories	172
Workshops	513
Bakehouses	292
Workplaces	131
Offensive Trades	87
Private Slaughterhouses	295
Food Preparing and Storing Places	443
Places of Public Entertainment	117
Tents, Vans and Sheds	147
Schools	40
Testing Drains :—	
By Smoke	87
By Water	380
By Coloured Water	27
By Breaking Down	3
Ashes Receptacles	4,022
Dairies, Cowsheds and Milkshops	1,133
Samples of Milk procured for :—	
Chemical Analysis	289
Bacteriological Examination	110
Bacterial Content	67
Sediment	37
Samples of Other Food and Drugs under the Food & Drugs (Adulteration) Act, 1928, etc.	98
Samples of Fertilisers and Feeding Stuffs	9
Conversions	84
Samples of Water procured	4
Insufficient Water Supply	25
Smoke Observations	25
Visits to Glass Works (Straw Sterilization)	39
Enquiries *re* Broker's Licences	9
Visits to work in progress (P.H. Acts, Housing Acts, Conversions, etc.)	16,749
Rag Flock Acts	—
Sanitary Accommodation in Shops	12
Rats and Mice (Destruction) Act	39
Miscellaneous Visits	2,723
	35,779

Table 37.

Sanitary Defects—Number of notices served during 1932, and results.

Subject of Notice	Preliminary Notices	Statutory Notices	Number complied with	Number outstanding at end of year	Prosecutions
Ditches requiring cleansing	7	—	7	—	—
Defective drains	127	23	120	7	—
Choked drains	172	26	172	—	—
Insufficient closet accommodation	4	1	6	1	—
Absence of proper sink	120	17	120	2	—
Conversion of trough closets to water closets	—	—	—	—	—
Defective water closets	123	30	125	3	—
Defective pail closets	4	—	5	—	—
Defective privy middens	3	—	5	—	—
Defective gullies and dishstones	99	34	97	2	—
Defective sink waste pipes	269	54	263	6	—
Defective W.C. cisterns and flushing fittings	80	24	84	5	—
Defective urinals	—	—	—	—	—
Defective soil pipes	—	—	—	—	—
Sink waste pipes connected with drains	—	—	—	—	—
Yards and passages unpaved	20	2	16	5	—
Defective yard paving	310	74	315	10	—
Dampness arising from :—					
Defective roofs	646	74	665	28	—
Defective eavesgutters	792	153	791	10	—
Defective downspouts	413	107	408	17	—
Defective external pointing	905	154	906	29	—
Insufficient ventilation of rooms	189	28	187	2	—
Insufficient water supply	10	—	3	10	—
Defective manure middensteads	2	—	3	2	—
Dwelling houses to be whitewashed	12	1	14	—	—
Defective chimney flues	46	15	46	—	—
Defective ashpits to be repaired	453	—	453	—	—
,, ,, to be abolished	805	509	640	241	—
Galvanised Metal Dust Bins to be provided	835	509	723	158	—
Absence of ashes accommodation	76	16	88	13	—
Disused ashpits abolished	—	—	—	—	—
Defective window sash-frames and sashcords	1596	450	1665	21	—
Defective floors	976	238	993	18	—
Defective stairs	144	32	152	16	—
Defective internal plaster work	863	189	892	21	—
Defective fireplaces	473	112	507	11	—
Defective washboilers	341	91	356	9	—
Defective doors, cupboards, &c.	449	110	483	7	—
Defective gas pipes and fittings	77	22	81	4	—
Defective water pipes and fittings	7	4	6	1	—
Defective yard division walls	111	18	113	7	—
Dangerous and defective chimney stacks	125	20	120	5	—
Fractured internal walls	74	10	72	2	—
Defective and bulging external walls	263	59	251	12	—
Filthy condition of premises	66	—	68	2	—
Accumulation of manure or offensive matter	30	3	23	13	—
Keeping of animals, &c.	6	—	4	5	—
To abate overcrowding of dwelling houses	4	1	5	2	—
Miscellaneous	518	87	493	31	—

Table 37.—Continued.

Contraventions of :—					
Milk and Dairies Order, 1926	34	—	33	1	3
Milk (Special Designations) Order, 1923	—	—	—	—	—
Public Health (Condensed Milk) Regulations, 1923 and 1927	—	—	—	—	—
Artificial Cream Act, 1929	—	—	—	—	—
Public Health (Meat) Regulations, 1924	15	—	15	—	—
Merchandise Marks Act, 1926	1	—	1	—	1
Agricultural Produce (Grading and Marking Act, 1928)	—	—	—	—	—
Sale of Food Order, 1921	5	—	5	—	5
Public Health (Preservatives, &c. in Food) Regulations	—	—	—	—	—
Factory and Workshop Acts	46	—	44	2	—
Contraventions of Bye-laws :—					
Common Lodging Houses	1	—	1	—	—
Houses-let-in-lodgings	1	—	1	—	—
Tents, vans, sheds	—	—	—	—	—
Slaughterhouses	—	—	—	—	—
Prevention of Nuisances	6	—	2	4	—
Drainage of existing buildings	—	—	—	—	—
	12754	3297	12648	745	9

Referred to other Departments.

Choked Street Gullies, &c., reported to Borough Engineer	21
Waste Water reported to Water Department	63
Dangerous structures reported to Borough Engineer	11
Escapes of Coal Gas reported to Gas Department	7
Choked Sewers reported to Borough Engineer	33

During the year, 505 complaints of choked drains were made to the Department. Of this number, 399 drains were freed from obstruction by members of the staff of the sanitary department, thus obviating the necessity for serving notices upon the owners.

SMOKE ABATEMENT.—In my Annual Report last year I expressed the opinion that the problem of smoke abatement was one which could only be dealt with effectively on regional lines and that a Regional Smoke Abatement Advisory Committee for the South West Lancashire Area should be formed.

At a meeting of representatives of local authorities in this area, held at Liverpool on April 10th, 1933, such a Committee was formed. This Committee will not in any way take over or control the administration regarding smoke abatement in the districts comprised in the area but will act in a purely advisory capacity.

The objects of the Committee are set out as follows :—

(a) To bring about a more uniform administration of the law in relation to the emission of smoke.

(b) To standardise the methods of taking observations.

(c) In consultation with the various educational authorities to organise courses of training for stokers and boiler attendants throughout the area, to arrange for the holding of examinations in suitable centres, and to issue certificates to successful candidates.

(d) To secure a better understanding between Local Authorities and manufacturers.

(e) To arrange for the preparation and distribution of leaflets and other literature dealing with the smoke nuisance and its prevention.

(f) To keep in touch with all other bodies, Regional and National, engaged in smoke prevention work, and to collect all information relative to the latest developments in smoke prevention apparatus and appliances.

(g) To keep records of the state of the atmosphere on Merseyside and in South West Lancashire by the collection of meteorological data.

Much useful work should be done by this Committee pending the formation of a Smoke Abatement Regional Committee with statutory powers.

FACTORIES AND WORKSHOPS.—(a) Factories—7 defects remediable under the Public Health Acts were reported by H.M. Inspector of Factories, all of which were remedied during the year.

(b) Workshops—The number of workshops registered is 173 and Table 38 shows the classes of such workshops.

Table 38.

Registered workshops.

Workshops on the Register (s. 131) at the end of the year.	Number.
Dressmakers and mantle making	6
Milliners	12
Tailors	13
Hosiery Knitters	1
Joiners, builders, cabinet-makers and plumbers, etc.	24
Blacksmiths, wheelwrights, coach builders and masons	9
Weighing machine repairers	1
Cloggers and boot repairers	62
Cycle Makers	3
Tripe Dressers	2
Herbal Brewers	3
Seltzogene charge maker	1
Cab washing	2
Saddler	2
Sundries	20
Ice Cream Makers	6
Workshop Laundries	6
Total Number of Workshops on Register	173

(c) Outworkers—No lists of outworkers were received from employers during the year.

Table 39 gives particulars of the administrative action taken under the Factory and Workshop Act, 1901.

Table 39.

Factories, Workshops and Workplaces.

1.—Inspection of Factories, Workshops, and Workplaces, including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises (1)	Number of Inspections (2)	Number of Written Notices (3)	Number of Occupiers Prosecuted (4)
Factories (including Factory Laundries)	172	20	—
Workshops (including Workshop Laundries)	513	30	—
Workplaces (other than Outworkers' premises)	131	5	—
Totals	816	55	—

2.—Defects found in Factories, Workshops and Workplaces.

Particulars. (1)	Number of Defects. Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	Number of offences in respect to which Prosecutions were instituted. (5)
Nuisances under the Public Health Acts—*				
Want of cleanliness	43	46	—	—
Other nuisances	8	10	—	—
Sanitary accommodation—insufficient	1	1	—	—
unsuitable or defective	3	4	—	—
not separate for sexes	—	—	—	—
Offences under the Factory and Workshop Acts	—	—	—	—
Totals	55	61	—	—

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

3.—Outwork in unwholesome premises, Section 108—Nil.

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYELAWS OR REGULATIONS.—Offensive Trades.—There are 5 offensive trades in the borough, consisting of 4 tripe boilers and 1 gutscraper.

During the year, 87 visits were paid to premises of this nature.

Tents, Vans, Sheds, etc.—There were, at the end of the year, known to be 48 of these structures used as permanent habitations. Many of these structures are without adequate closet accommodation, water supply, drainage or house refuse accommodation.

The legal position with regard to these structures has not hitherto been satisfactory. Further powers have, however, now been obtained by the Corporation and Section 108 of the St. Helens Corporation Act, 1933, makes it an offence to place or keep on any land any tent, van, shed or similar structure intended to be used for human habitation without the previous approval of the Corporation, and such land must be provided with sufficient roads, sewers, drains, water supply, and sanitary and house refuse accommodation.

It is anticipated that with these increased powers considerable improvement in present conditions will be obtained and that the number of these structures will be considerably reduced in the future.

Regular inspections of these premises have been made by the staff during the year and 147 visits were paid.

Houses-Let-in-Lodgings.—There are only 12 premises registered as houses-let-in-lodgings, but there are others which are known to be used for the purpose but cannot be brought within the scope of the existing byelaws owing to their rateable values and rents being above the prescribed limits. It is hoped to have these byelaws revised at an early date. 202 visits were paid to these premises during 1932.

Common Lodging Houses.—There are seven common lodging houses registered for the accommodation of 295 lodgers. These premises were regularly inspected, 280 visits being paid; and one notice was served and complied with.

Further powers for dealing with common lodging-houses have been obtained by the Corporation by Section 121 of the St. Helens Corporation Act, 1933.

Under this Section no house or part of a house shall be exempt from the provisions with respect to Common Lodging-houses on the ground that the house is let for a longer period than one day, or is not let for a less period than one week.

Further, the Corporation may now refuse to register or renew the registration of a Common Lodging-house unless they are satisfied :—

(1) that the premises are suitable or suitably equipped for use and occupation as a common lodging-house ; and

(2) that the use of the premises as a common lodging-house is not likely to occasion inconvenience or annoyance to the inhabitants or persons in the neighbourhood.

With these extended powers better supervision of these classes of premises will be possible with, it is hoped, a better standard of accommodation.

Pig-keeping.—On December 5th, 1930, Byelaws with respect to Nuisances were confirmed by the Ministry of Health. Amongst other matters these byelaws deal with the prevention of the keeping of animals so as to be injurious to health, and byelaw Nod. 10 makes it an offence, with certain exceptions, for a person to keep pigs within eighty feet from any dwellinghouse situate within a radius of three-quarters of a mile from the Town Hall.

Though this byelaw did not come into force until twelve months after its confirmation and repeated warnings were given, it was found necessary to institute legal proceedings in three instances for breaches of the byelaw. In two instances the offenders were fined 5/- each, and in the third 10/-. So far as is known to the department in no instance is this Byelaw now being contravened.

There were 51 persons in the borough known to be engaged in the keeping of pigs at the end of the year.

OTHER SANITARY CONDITIONS.—Rats and Mice Destruction Act, 1919.—The duties of Rat Officer under the Rats and Mice Destruction Act, 1919, are now carried out by the Chief Sanitary Inspector.

Places of Public Entertainment.—These premises have been regularly inspected throughout the year and were generally found to be kept in a satisfactory condition.

Canal Boats.—No canal boat was inspected during the year, and it would appear that for the time being the canal has fallen into disuse.

Mortuary.—A public mortuary with post-mortem room is maintained behind the Town Hall and is under the supervision of the Medical Officer of Health. During the year 38 bodies were received into the mortuary and 15 post-mortem examinations were conducted.

Arrangements for the disposal of the dead.—The area of the original cemetery in 1858 was 20 acres. This was extended by 8 acres, 35 poles, 22 yards in 1911 and by 2 roods, 14 poles, 7 5/6th yards in 1914, the total area at the present time being 28 acres, 3 roods, 9 poles, 29 5/6th yards.

During 1931 a further 40 acres, 22 poles of land immediately adjoining the present cemetery were acquired by the Corporation, of which it is proposed to utilise 28 acres for burial purposes.

About 4 acres only of the present cemetery remain available for burial purposes which, added to the 28 acres recently acquired, will, it is estimated, be adequate for the next 20—30 years.

The Rag Flock Acts, 1911 & 1918.—No sample of Rag Flock was taken during the year.

Sanitary Condition of Schools.—During the year 1932 there were 40 public elementary schools with 83 departments in the Borough.

Conditions in council schools are on the whole good, all these being of fairly recent construction. In some of the older schools, however, pail closets are still in existence, whilst in others trough closets with automatic flushing cisterns are still being used. At one school the pail closets have during 1932 been replaced by pedestal wash-down water closets, and in another some of the trough closets have also been replaced by pedestal water closets.

I would urge that wherever possible the remainder of the unsatisfactory types of closets should be replaced.

XIV.—HOUSING.

STATISTICS.—Of the 673 houses erected during 1932, 446 were subsidy houses, and, of these, 386 were erected by the Local Authority and 60 by private or commercial enterprise.

Table 40 shows the number of dwelling houses erected in each ward since 1904.

Table 40.

The wards of the borough in which dwelling houses have been erected during the years mentioned.

Year	North Eccles-ton	South Eccles-ton	Central	North Windle	South Windle	Hard-shaw	East Sutton	West Sutton	Parr	Total
1904	105	53	7	37	18	47	59	1	70	397
1905	19	93	1	44	16	90	42	10	54	369
1906	11	51	—	31	13	31	73	24	39	273
1907	22	38	—	26	—	22	77	3	29	217
1908	2	52	—	4	2	27	22	—	20	129
1909	—	36	—	10	—	10	6	3	10	75
1910	2	31	—	10	—	24	18	—	25	110
1911	14	20	—	—	—	30	75	26	12	177
1912	35	28	—	4	—	26	28	58	1	180
1913	10	31	—	—	3	19	14	99	6	182
1914	10	42	—	9	16	14	20	63	29	203
1915	6	9	—	26	1	2	8	25	27	104
1916	—	12	—	1	1	2	4	16	16	52
1917	—	—	—	—	—	—	—	9	—	9
1918	—	—	—	—	—	—	—	3	—	3
1919	—	1	3	—	—	—	—	—	—	4
1920	—	—	—	—	—	—	—	—	—	—
1921	—	1	—	41	—	—	—	6	—	48
1922	—	1	—	164	—	—	—	—	—	165
1923	1	5	2	2	—	2	—	33	—	45
1924	2	24	—	25	—	—	2	45	5	103
1925	8	76	—	90	—	1	9	48	15	247
1926	19	172	—	106	16	4	19	63	51	450
1927	33	189	—	125	3	68	160	14	56	648
1928	12	116	3	237	5	2	97	13	335	820
1929	4	219	—	35	—	21	26	5	185	495
1930	24	148	1	39	—	53	41	3	54	363
1931	79	61	—	52	1	15	45	29	17	299
1932	449	77	1	10	—	27	69	37	3	673

A statement as to the number of houses erected with and without State assistance, together with a summary of the work of the department in regard to housing, is given in Table 41.

Table 41.

Housing.

Number of new houses erected during the year :—

(a) Total (including numbers given separately under (b))	673
(b) With State assistance under the Housing Acts :	
(i) By the Local Authority	386
(ii) By private or commercial enterprise	60

1.—Inspection of Dwelling-houses during the Year :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	3739
(b) Number of inspections made for the purpose	20404
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	569
(b) Number of inspections made for the purpose	2845
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	4
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	3703

2.—Remedy of Defects during the year without service of formal notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 3028

3.—Action under Statutory Powers during the year :—

A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..... nil.

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(a) By owners ..... nil.

(b) By Local Authority in default of owners ..... nil

B.—Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 792

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(a) By owners 739

(b) By Local Authority in default of owners ..... nil.

C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which Demolition Orders were made ..... nil.

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders ..... nil.

D.—Proceedings under Section 20 of the Housing Act, 1930 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ..... nil.

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ..... nil.

E.—Proceedings under Section 3 of the Housing Act, 1925 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..... nil.

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(a) By owners ..... nil.

(b) By Local Authority in default of owners ..... nil.

(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close nil.

F.—Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925 :—

(1) Number of dwelling-houses in respect of which Closing Orders were made ..... nil.

(2) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit ..... nil.

(3) Number of dwelling-houses in respect of which Demolition Orders were made ..... nil.

(4) Number of dwelling-houses demolished in pursuance of Demolition Orders ..... nil.

OVERCROWDING.—An analysis of the Census Return for 1931 shows there is serious overcrowding in St. Helens. In his report on the Census the Registrar General points out that as measured by the conventional " more than two persons per room " index of overcrowding, 16,927 or 16.43% of the population in St. Helens were living in overcrowded conditions. This is the highest percentage of overcrowding in any of the County Boroughs in Lancashire. Further, of the 16, 927 persons referred to, 3471 (equivalent to 3.25% of the population) were living more than 3 persons per room.

The extent of overcrowding in St. Helens is also apparent in the following Census figures which show the density of persons per room throughout the borough as compared with the corresponding averages for Lancashire as a whole and the County Boroughs in Lancashire.

	Density of persons per room
St. Helens	1.13
Lancashire as a whole	0.86
County Boroughs in Lancashire	0.89

HOUSING REQUIREMENTS OF THE BOROUGH.—The additional information regarding housing conditions obtained from the Census of 1931 has shown that the housing requirements

of the borough were considerably under-estimated in the Quinquennial Statement prepared under the Housing Act, 1930 (Section 25 (2).) The position has, therefore, been reviewed and the following is a revised statement of the borough's present and future housing requirements.

Present Requirements :—In the past it has been the practice to estimate housing needs on a population basis. With a falling birth rate and resultant smaller families, and also as the design of a self-contained house is normally based on the conception of its occupation by a single family, it is now submitted that the real standard of housing shortage in a district is the excess of the number of families over the number of dwellinghouses. According to the Census Return of 1931 there were in St. Helens on April 26th, 1931 :

No. of private families		22,960
No. of structurally separate dwellinghouses occupied	21,373	
No. of structurally separate dwellinghouses unoccupied	192	
		21,565
No of families in excess of number of dwellings		1,395

This indicates that at that date there was immediate need in St. Helens for 1,395 houses to meet the housing needs of the population.

Between then and the end of December, 1932, however, approximately 869 houses were erected, so that the number of houses required at the end of 1932 to overcome the deficiency apparent at the time of the Census was 526, and in addition further houses were required to meet the increase in population since the Census.

Future Requirements.—According to Census Returns for 1921 and 1931 there were in St. Helens :

	No. of private families.
1931 Census	22,960
1921 Census	19,688
An increase of	3,272 families.

As the present rate of marriage in St. Helens is higher than the average for the past ten years it can be assumed that there will be at least a similar increase in the number of families during the 10 years ending 1941. The number of houses required for the increase in the number of families during that period, may, therefore, be taken as 3,272.

Further, apart from providing houses for families at present without a house and for increase in the number of families consequent on increasing population, provision has to be made for re-housing families displaced as a result of demolition of houses under the Housing Act, 1930. It is estimated that 256 houses will have to be provided for this purpose in the first five years and 100 in the second five years ending 1941.

Summary.—The following is a summary of the estimated present and future requirements during the period ending 1941 :—

No. of families in excess of the No. of dwellings at 1931 Census	1,395	
Less No. of houses built since 1931 Census	869	
No. still required		526

Estimated No. of houses still required to meet increased number of families during 10 years ending 1941		3,272
Houses to be demolished—		
During first five years	256	
During second five years	100	
		356
Total		4154

It will be noted that no allowance has been made for probable increase in marriages consequent on an increasing population nor for the effect of economic and social considerations in encouraging young married families to live with their parents, as it is considered that these factors will to a large extent counterbalance each other.

SLUM CLEARANCE.—Since the passing of the Housing Act, 1930, special attention has been paid to the improvement of bad housing conditions in St. Helens.

In December, 1930, I made a special report on the matter and suggested the steps which might be taken during the succeeding five years for dealing with insanitary property. In that report it was suggested that certain areas might be dealt with by means of Improvement Schemes and the remainder of insanitary property dealt with as Individual Unfit Houses. That report was adopted by the Council and submitted to the Ministry for approval. Since then, however, opinions have considerably changed and it is now considered more expedient to proceed by means of small Clearance Schemes together with dealing with Individual Unfit Houses.

During 1932 Official Representations were made by me regarding two areas in the Greenbank district and one in the centre of the town, and a number of Individual Unfit Houses were dealt with under Section 19 of the Act.

Greenbank Area.—On October 25th, 1932, I submitted a report to the Committee regarding alternative methods for dealing with the property in the Greenbank district. After considering the report, the Committee decided to deal with the worst areas in the district by means of clearance schemes, and with the remaining property under Sections 17 and 19 of the Housing Act, 1930, and not, as had been originally suggested, by means of a large improvement scheme.

Clearance Areas.—Consequent on this decision, Official Representations regarding two areas in this district, namely, the Bath Street Area and the Short Street Area, were made by me on December 28th, 1932, and on January 4th, 1933, the Council passed Resolutions declaring these areas to be Clearance Areas. A Clearance Order was made by the Council in respect of the Short Street Clearance Area on April 3rd, 1933, and in respect of the Bath Street Clearance Area on June 7th, 1933.

The Short Street Clearance Area consists of the following dwellinghouses :—

(a) Occupied :

Nos. 1, 2, 3 and 4, Court No. 1, Liverpool Road.

(b) Unoccupied :

Nos. 1, 3, 5, 7, 9, 11 and 13 Short Street ; Nos. 9 and 11, Sandfield Crescent and 2 Short Street ; Nos. 4, 6, 8, 10, 12, 14 and 16 Short Street.

The Bath Street Clearance Area contains :—

(a) Seven occupied dwellinghouses, viz. :—

Nos. 8 and 10 Bath Street ; Nos. 1, 2, 3, 4, and 5 Back Bath Street.

(d) Two storey brick building adjoining No. 8, Bath Street and No. 1, back Bath Street, a portion of which is used as a lair for cattle and a portion of which is disused but was formerly used as a slaughterhouse.

(c) Two storey brick and wooden erection adjoining No. 5, back Bath Street, a portion of which is used as a stable and a portion of which was formerly used as a pigstye.

Individual Unfit Houses.—The following individual unfit houses in the Greenbank District were also represented by me as being unfit for human habitation :—

	Date of Official Representation.
29 Mount Street	December 28th, 1932.
41 Liverpool Street	do.
27 Liverpool Street	do.
7 Liverpool Street	do.
3 Mill Place	January 11th, 1933.
5 Mill Place	do.
7 Mill Place	do.
9 Mill Place	do.
9 Copperas Street	do.
11 Copperas Street	do.
No. 4, Court No. 2, Bold Street	do.
Disused house adjoining No. 4, Court No. 2, Bold Street	do.
No. 3 Court, No. 3, Liverpool Street	do.
No. 5, Court No. 3, Liverpool Street	do.
No. 27 back Bold Street	do.

Undertakings have been accepted by the Council to repair 7 Liverpool Street, 27 Liverpool Street and 9 and 11 Copperas Street. An undertaking has also been accepted from the owners of 41 Liverpool Street that the house shall not be used for human habitation, and Demolition Orders have been made in respect of the remaining houses.

Tontine Street and Market Street Area.—Official Representation was made by me regarding another area in the town, namely, the Tontine Street and Market Street Area on October 25th, 1932, and consequent thereon the Council passed a Resolution declaring the area to be a Clearance Area on October 28th, 1932, and a Clearance Order was made on June 7th, 1933.

The area contains the following dwellinghouses :—

(a) Occupied :—

Nos. 37, and 45 Market Street ; No. 15 Tontine Street.

(b) Unoccupied :—

Nos. 39, 41, 43, and 47 Market Street ; Nos. 1 and 3, 5, 7, 9, 11, and 13, Tontine Street.

XV.—HEALTH EDUCATION.

HEALTH WEEK.—Health Week was conducted in St. Helens in the early part of the year under the joint auspices of the Health Committee and the Education Committee, and, in addition to the usual features, a special Health and Hygiene Exhibition was

held in the Town Hall throughout the week. The Exhibition, with which a Milk Exhibition by the St. Helens Milk Producers and Retailers was incorporated, proved very successful, and great interest was taken in the practical demonstrations of infant hygiene, clean food preparation, cookery, etc. The various exhibits of measures for the prevention of disease, and the exhibits of a modern home and of a clean shop and a dirty shop also received great attention, and their educational value was very apparent. In addition to the exhibition itself, short talks were given during the week in the Town Hall on various health matters, together with film lectures on the dangers and prevention of ill-health and health plays presented by local voluntary associations for girls. To make the appeal for interest in health matters as wide as possible, informal dinner hour meetings were held at several works. As in previous years, these informal gatherings were well attended and aroused much informative discussion on health matters.

Health Week ended with a special meeting at the Town Hall, on the occasion of the presentation to the Windle Pilkington Council Girls' School of the Shield, kindly presented by Mrs. McGhie for annual award to the school offering the best Essays in Mothercraft, and the presentation of the Prizes awarded in the Baby Show which had been held in connection with the Corporation Maternity and Child Welfare Centres during the previous month.

The enthusiastic co-operation both of the public and of many voluntary helpers did much to ensure the success of Health Week in St. Helens, and was evidence of a very real need, with a correspondingly earnest desire, for education in health matters.